

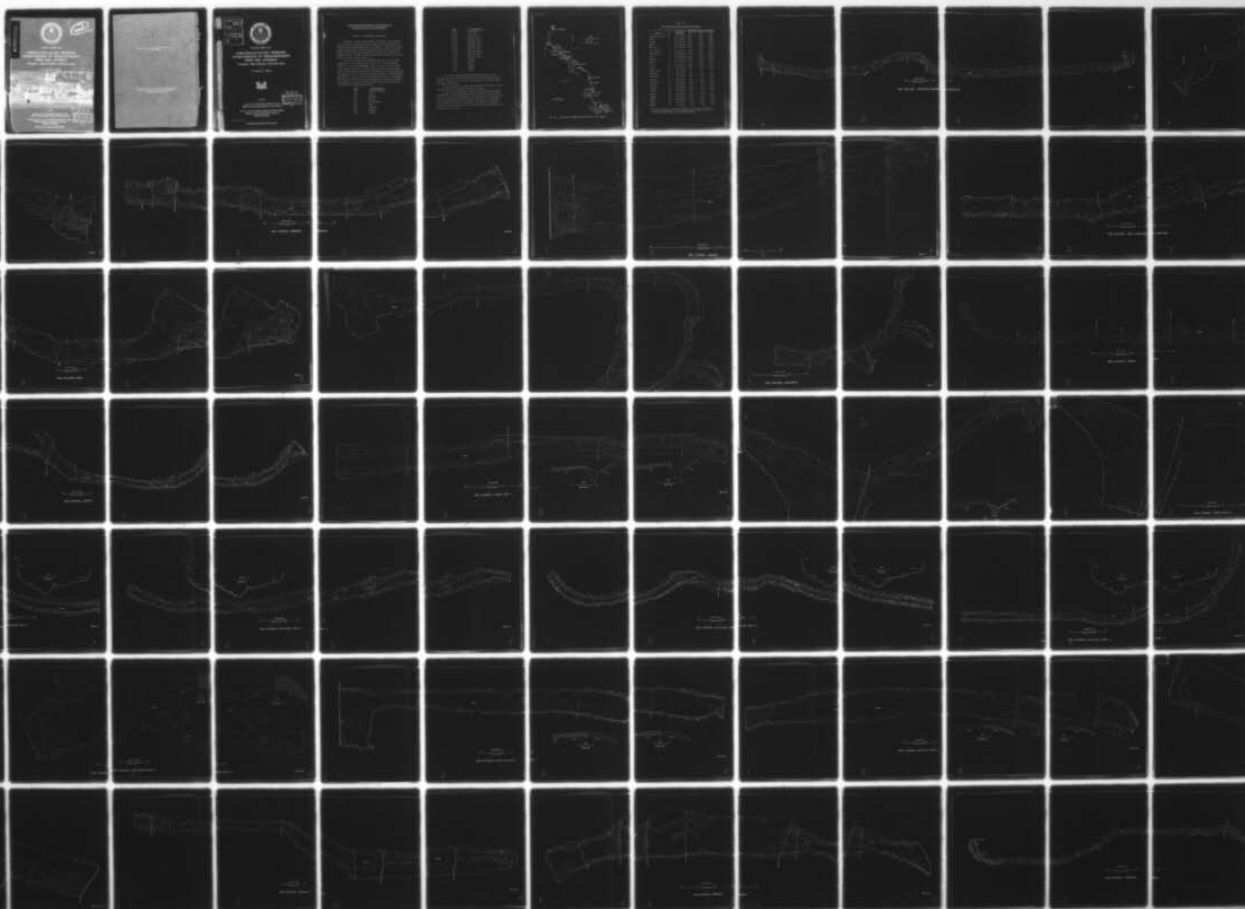
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ARMY ENGINEER WATERWAYS EXPERIMENT STATION VICKSBURG MISS F/G 8/8
COMPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISS--ETC(U)
JUN 74 V E LAGARDE, S J WINFREY
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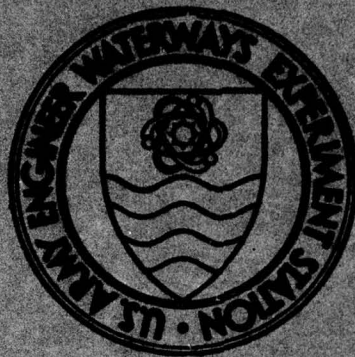
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TECHNICAL REPORT M-74-5

**COMPUTER-CALCULATED GEOMETRIC
CHARACTERISTICS OF MIDDLE-MISSISSIPPI
RIVER SIDE CHANNELS**

VOLUME II: SIDE-CHANNEL CONTOUR MAPS

by

V. E. LaGerde, S.-J. Winfrey

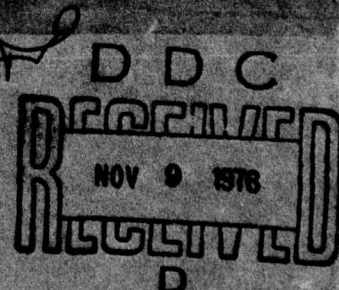
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June 1974

Sponsored by U. S. Army Engineer District, St. Louis
Office of Environmental Resources, St. Louis, Missouri

Conducted by U. S. Army Engineer Waterways Experiment Station
Mobility and Environmental Systems Laboratory
Vicksburg, Mississippi

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VOLUME II: SIDE-CHANNEL CONTOUR MAPS

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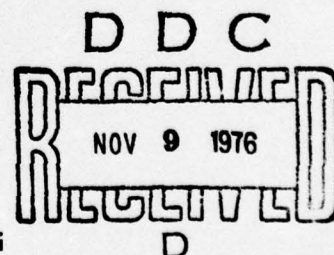


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ARMY-MRC VICKSBURG MISS



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COMPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF
MIDDLE MISSISSIPPI RIVER SIDE CHANNELS

VOLUME II: SIDE-CHANNEL CONTOUR MAPS

1. Volume I of this report contains a description of the procedures followed in quantifying several parameters that characterize the geometry of Middle Mississippi River side channels. This volume contains reduced reproductions of computer-calculated and -plotted contour maps, which were produced during the preparation of data for calculation of parameter values. All maps contain 5-ft-interval contours with elevation relative to mean sea level.

2. Fig. II-1 is an index map showing the location of all Middle Mississippi River side channels involved in the U. S. Army Engineer District, St. Louis, study program. Table II-1 is a list of all side channels shown in fig. II-1, the river mile locations of their extremities, and the river mile locations of the stations, and is included with the index map to aid in location of the side channels. The side channels numbered 5, 7, 13, 14, 15, 24, and 25 in table II-1 were not included in this project, so no contour maps are available for them in this volume. The following is a list of all side channels for which contour maps are included in this volume by map numbers.

<u>Map</u>	<u>Side Channel</u>
II-1	Jefferson Barracks
II-2	Calico
II-3	Osborne
II-4	Harlow
II-5	Fort Chartres
II-6	Moro
II-7	Kaskaskia
II-8	Crains
II-9	Liberty

<u>Map</u>	<u>Side Channel</u>
II-10a	Jones, Part 1
II-10b	Jones, Part 2
II-11a	Picayune, Part 1
II-11b	Picayune, Part 2
II-11c	Picayune, Part 3
II-11d	Picayune, Part 4
II-12a	Cape Bend, Part 1
II-12b	Cape Bend, Part 2
II-13a	Sante Fe, Part 1
II-13b	Sante Fe, Part 2
II-14	Billings
II-15	Buffalo
II-16	Browns
II-17	Thompson
II-18	Sister

3. The station locations marked on each contour map are the locations where the cross-sectional area of the side channel was calculated as a function of river stage. The results of those calculations are presented in Volume I.

4. The locations of rock and pile dikes and the direction of water flow through the side channel are marked on each map.

5. The physical dimensions of several side channels necessitated breaking them into parts while processing the data, since the computer used for calculating the parameters could not contain the total data set. Those side channels broken into parts are indicated in the list above. Contour maps were produced for each part. The location of each part relative to the total side channel is indicated on insets provided on the contour map for each part.

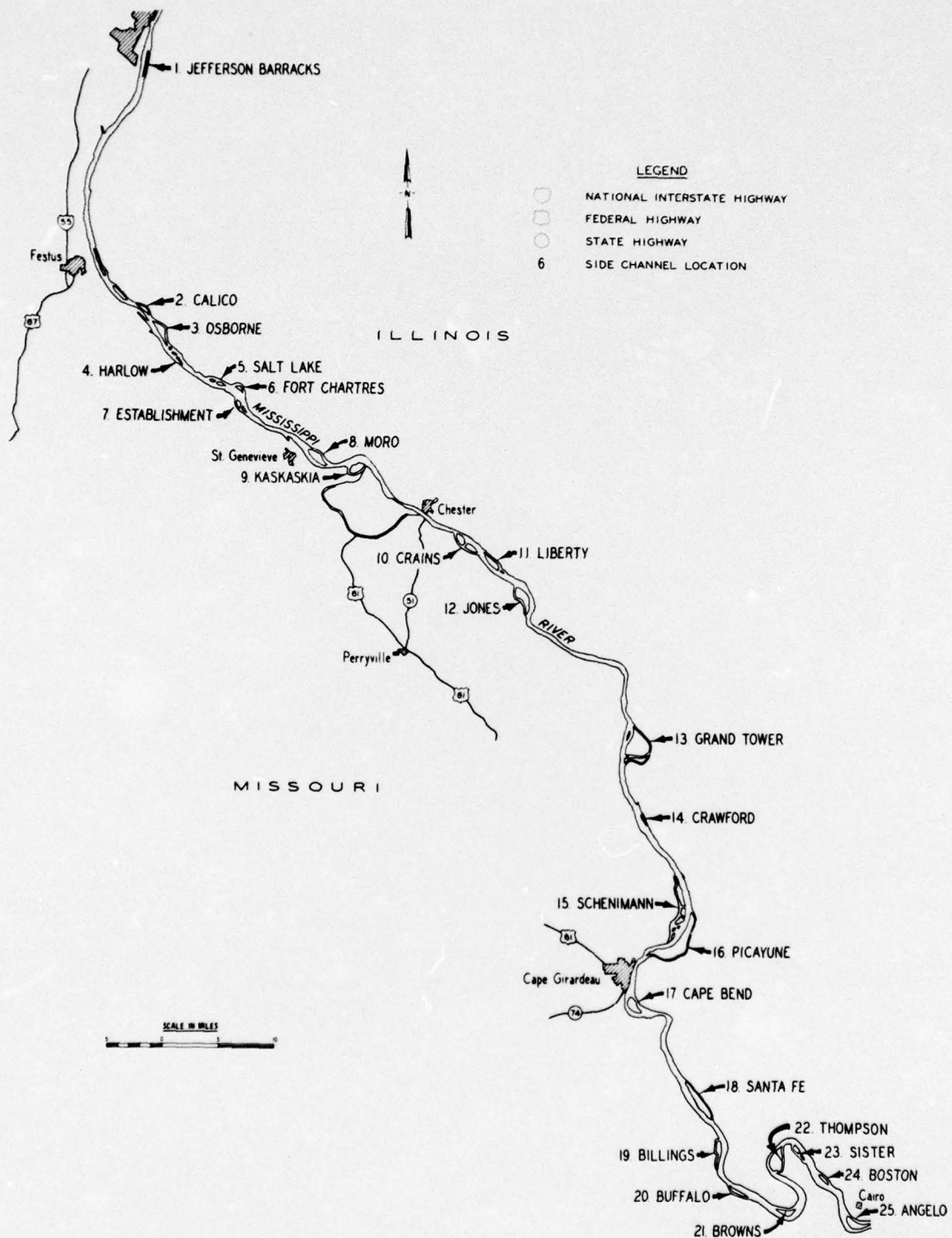


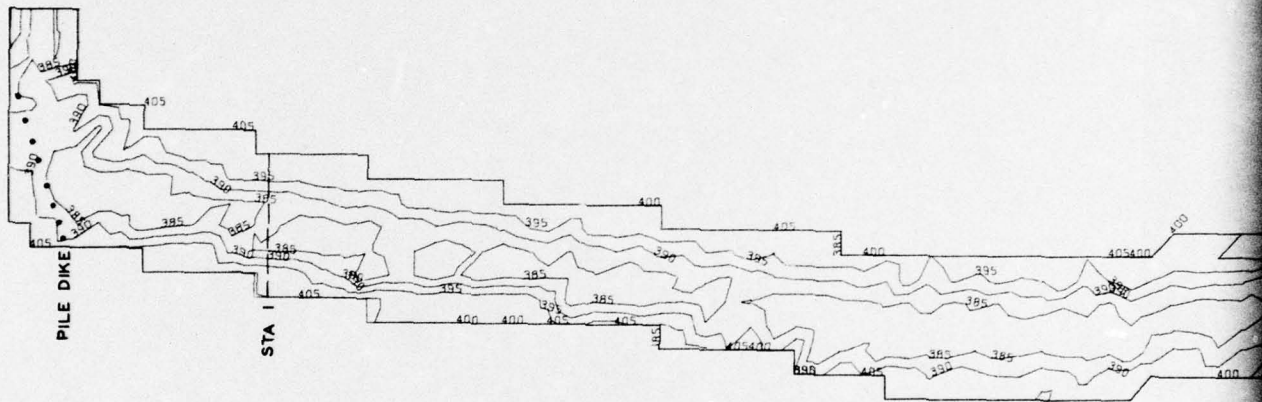
Fig. II-1. Index map of Middle Mississippi River side channels

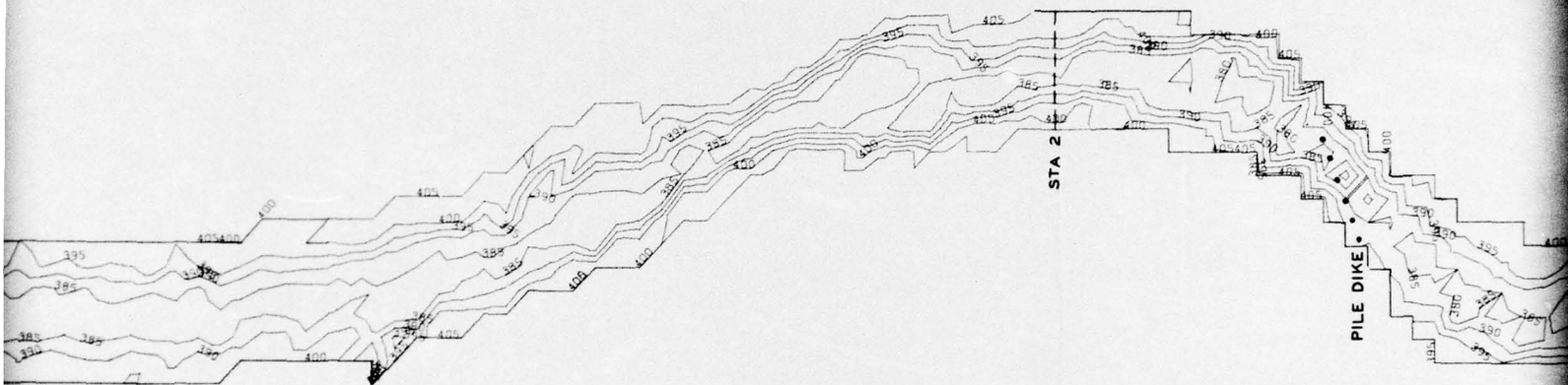
Table II-1

Side Channel Extremity and Station Locations

Name	No.	River Mile Extremes*	River Mile Station Locations		
			1	2	3
Jefferson Barracks	1	168.8-166.5L	166.6	167.5	168.6
Calico	2	148.3-147.4L	147.5	147.9	148.1
Osborne	3	146.3-144.3L	144.6	145.3	145.8
Harlow	4	143.0-141.7R	142.0	142.3	142.7
Salt Lake	5	141.5-136.8L	137.8	138.8	139.9
Fort Chartres	6	134.3-132.3L	132.8	133.1	134.1
Establishment	7	132.5-130.1R	130.9	131.5	132.3
Moro	8	122.6-120.1L	120.0	121.7	122.3
Kaskaskia	9	118.0-115.8R	116.5	117.2	117.4
Crains	10	105.6-104.4R	104.5	105.1	105.4
Liberty	11	102.8-99.9L	100.4	101.3	102.0
Jones	12	98.3-95.0R	95.6	96.4	98.2
Grand Tower	13	78.5-77.8R	--	--	--
Crawford	14	73.7-71.6L	72.2	72.6	73.6
Schenimann	15	62.5-57.1R	57.7	59.1	61.7
Picayune	16	60.6-54.8L	54.9	58.0	60.1
Cape Bend	17	51.4-47.6L	48.0	48.8	50.7
Santa Fe	18	40.4-35.4L	35.6	--	37.3
Billings	19	34.0-32.7R	33.0	33.5	33.9
Buffalo	20	26.8-24.7R	25.0	25.5	26.0
Browns	21	24.7-21.7L	22.1	22.8	24.2
Thompson	22	18.7-15.3R	15.9	17.7	18.6
Sister	23	14.4-11.9R	12.5	13.0	14.0
Boston	24	10.4-7.7L	8.3	8.8	10.1
Angelo	25	5.0-1.2L	2.6	4.0	4.8

* R and L indicate that the side channel is on the right or left of the river, respectively, when facing downstream.

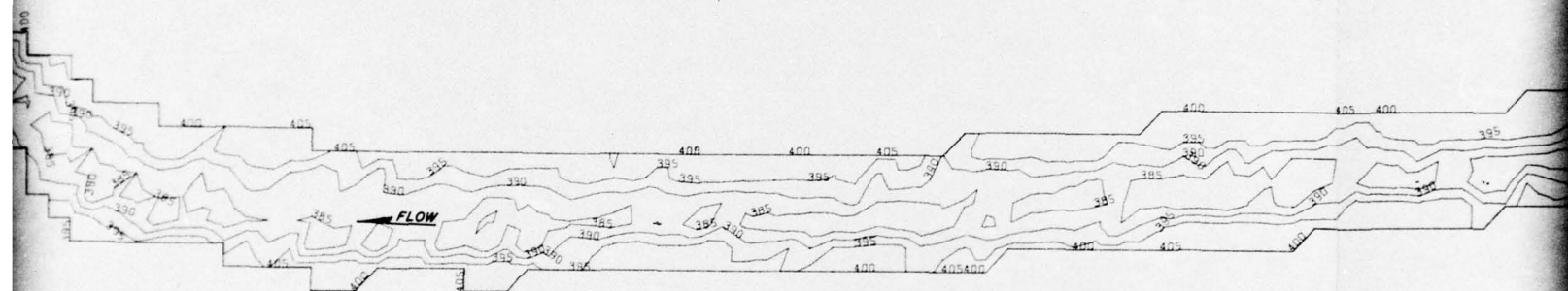




SCALE IN FEET
500 0 500 1000
CONTOUR INTERVAL 5 FT

SIDE CHANNEL JEFFERSON BARRAC

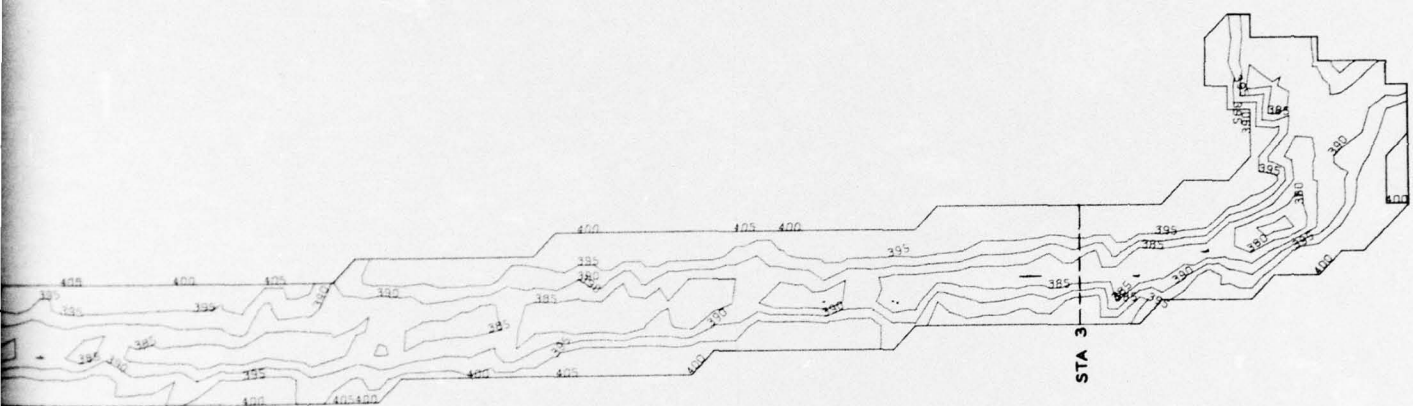
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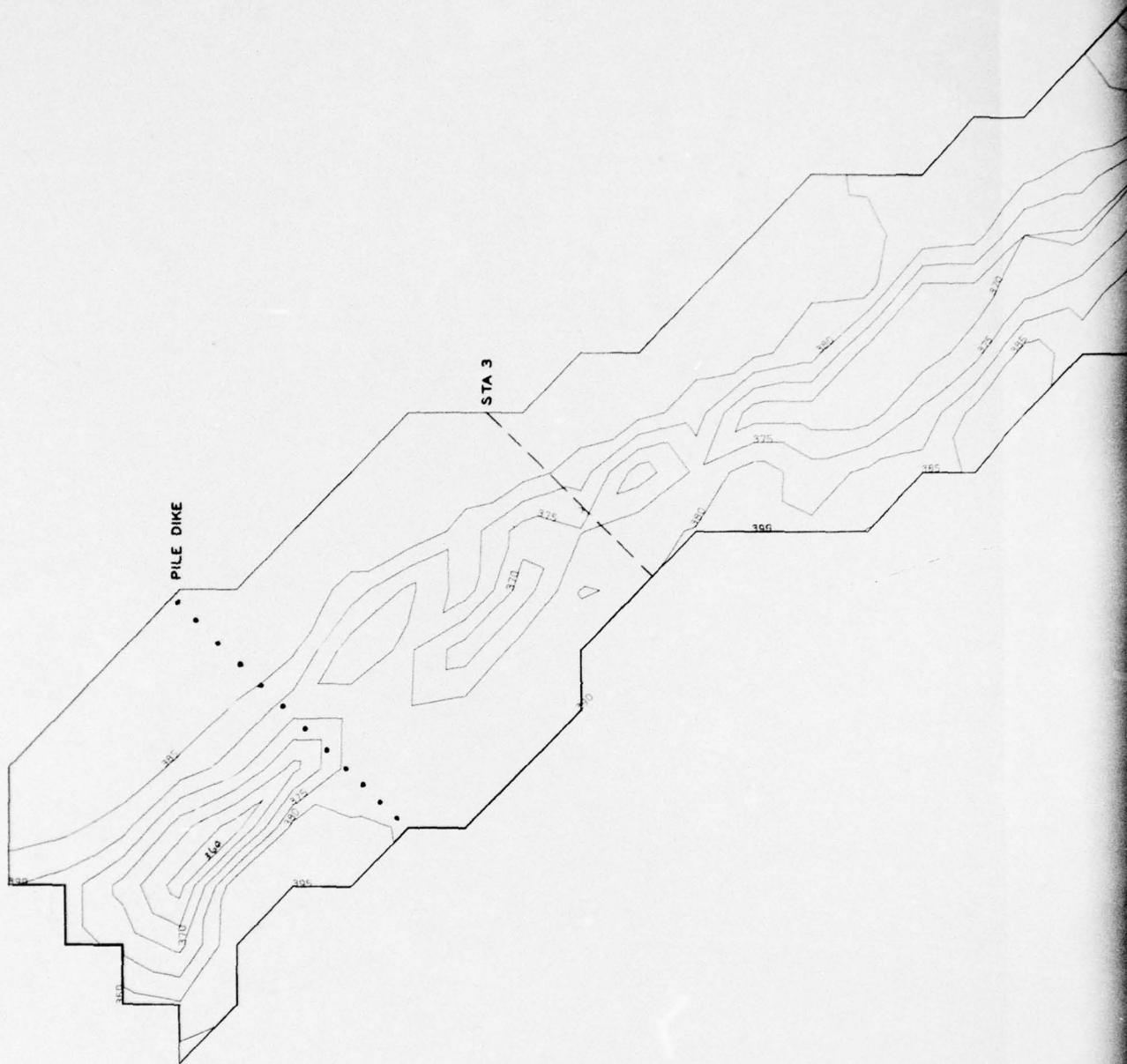
N BARRACKS

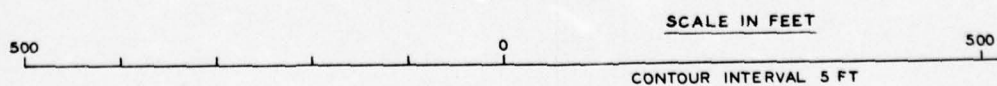
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MAP II-1

4





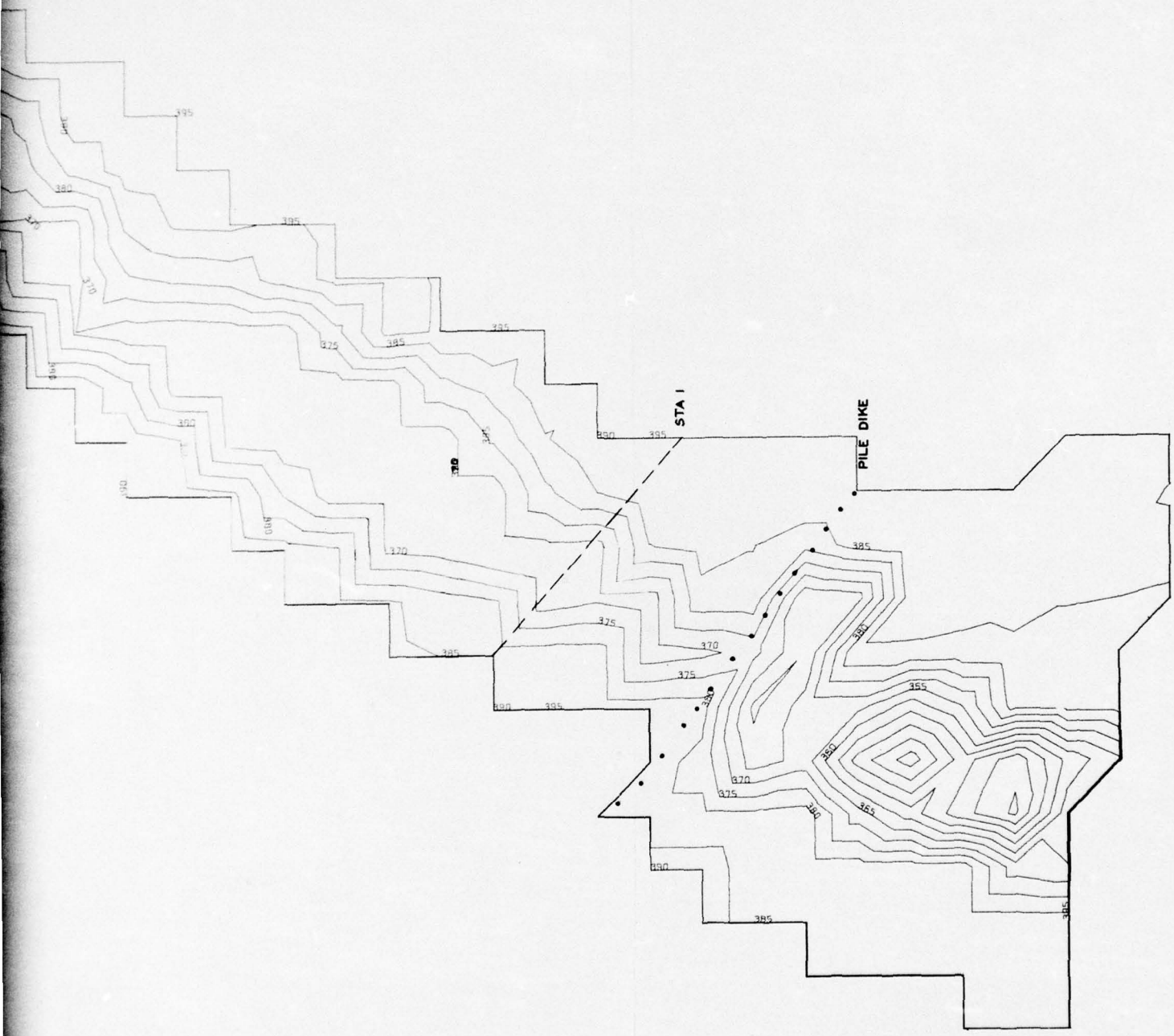
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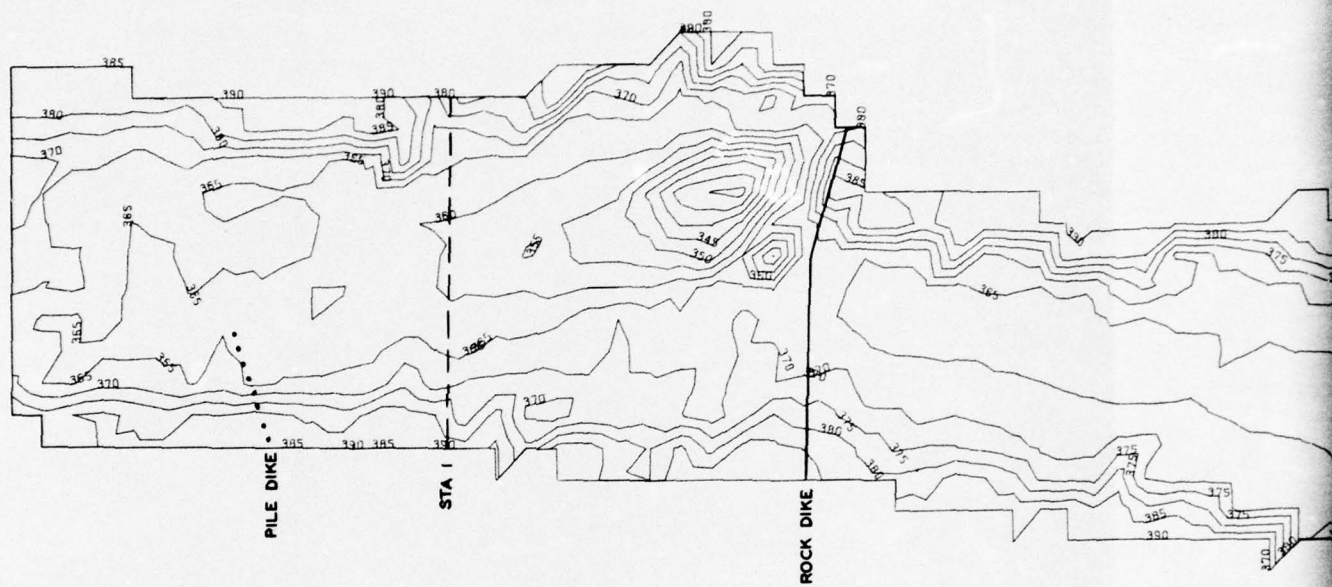
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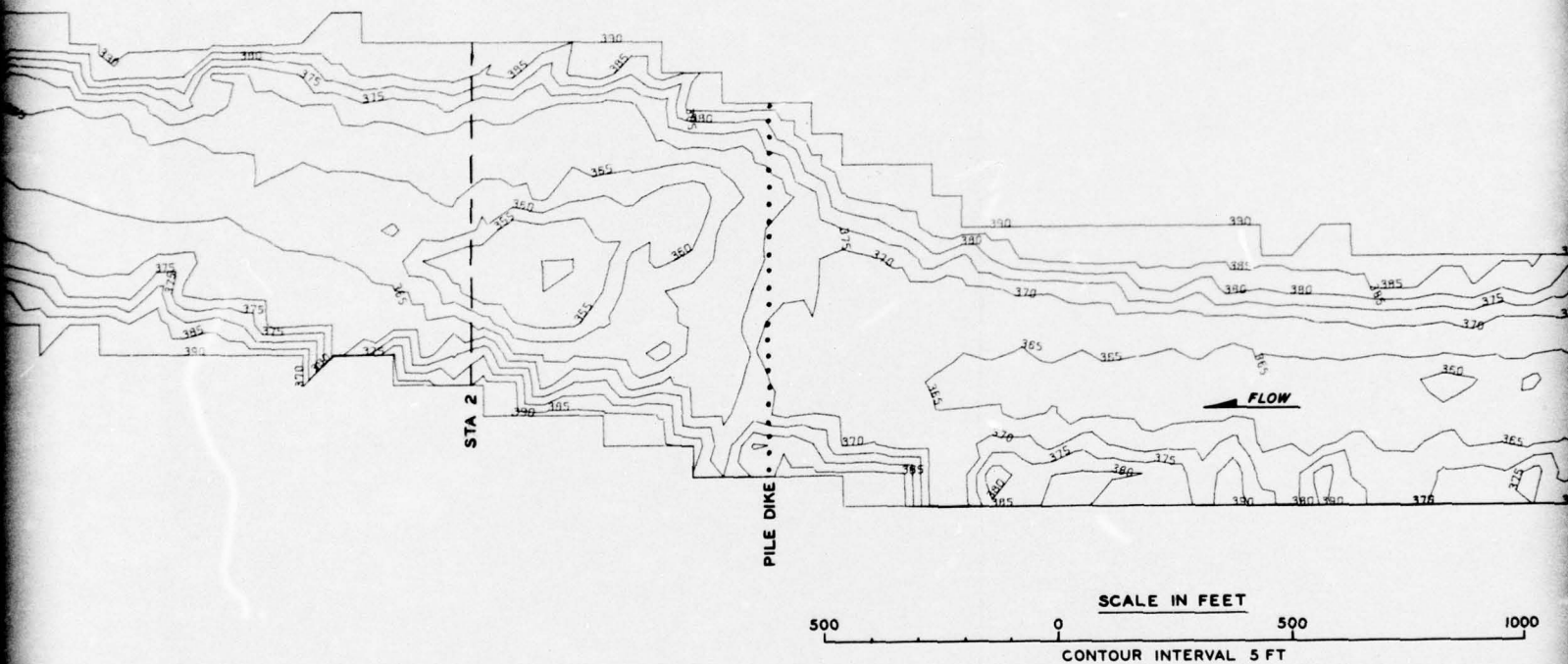


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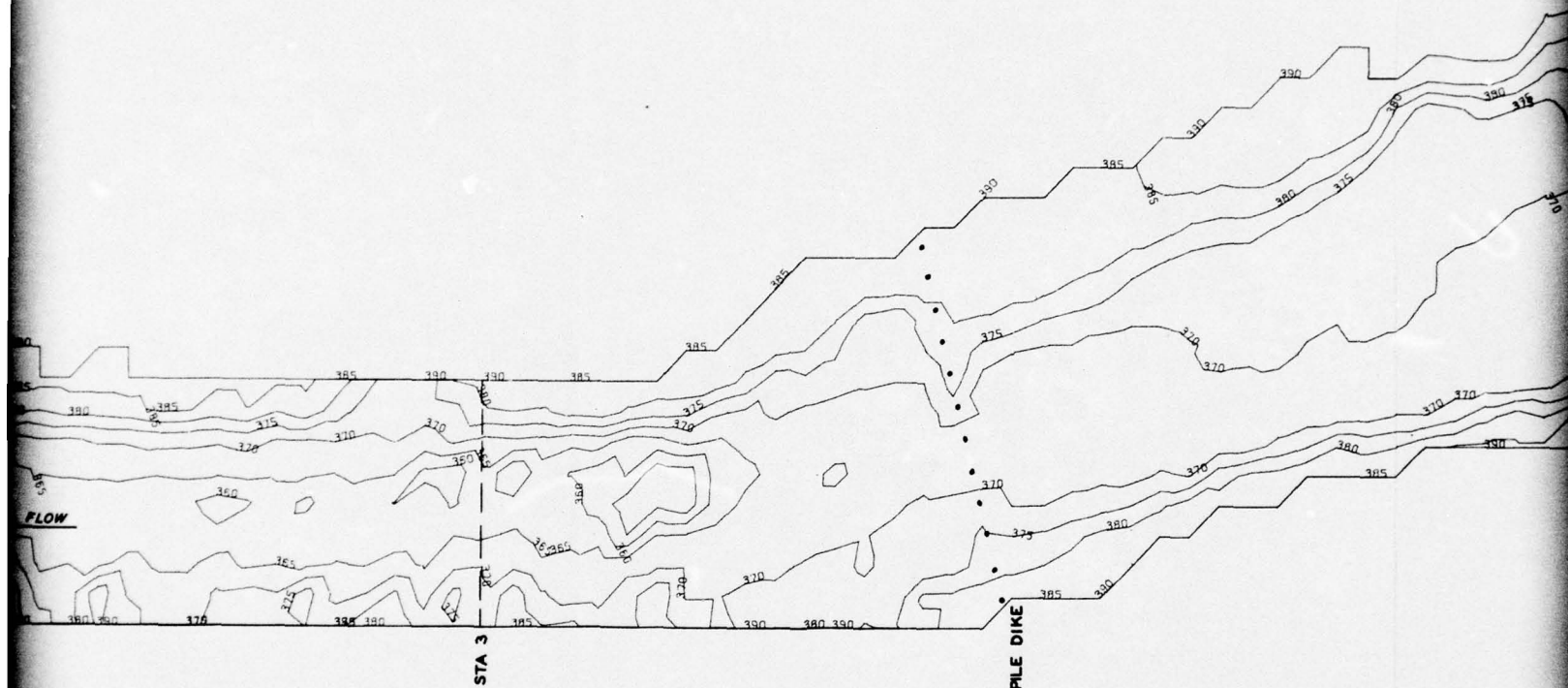






SIDE CHANNEL OSBORNE

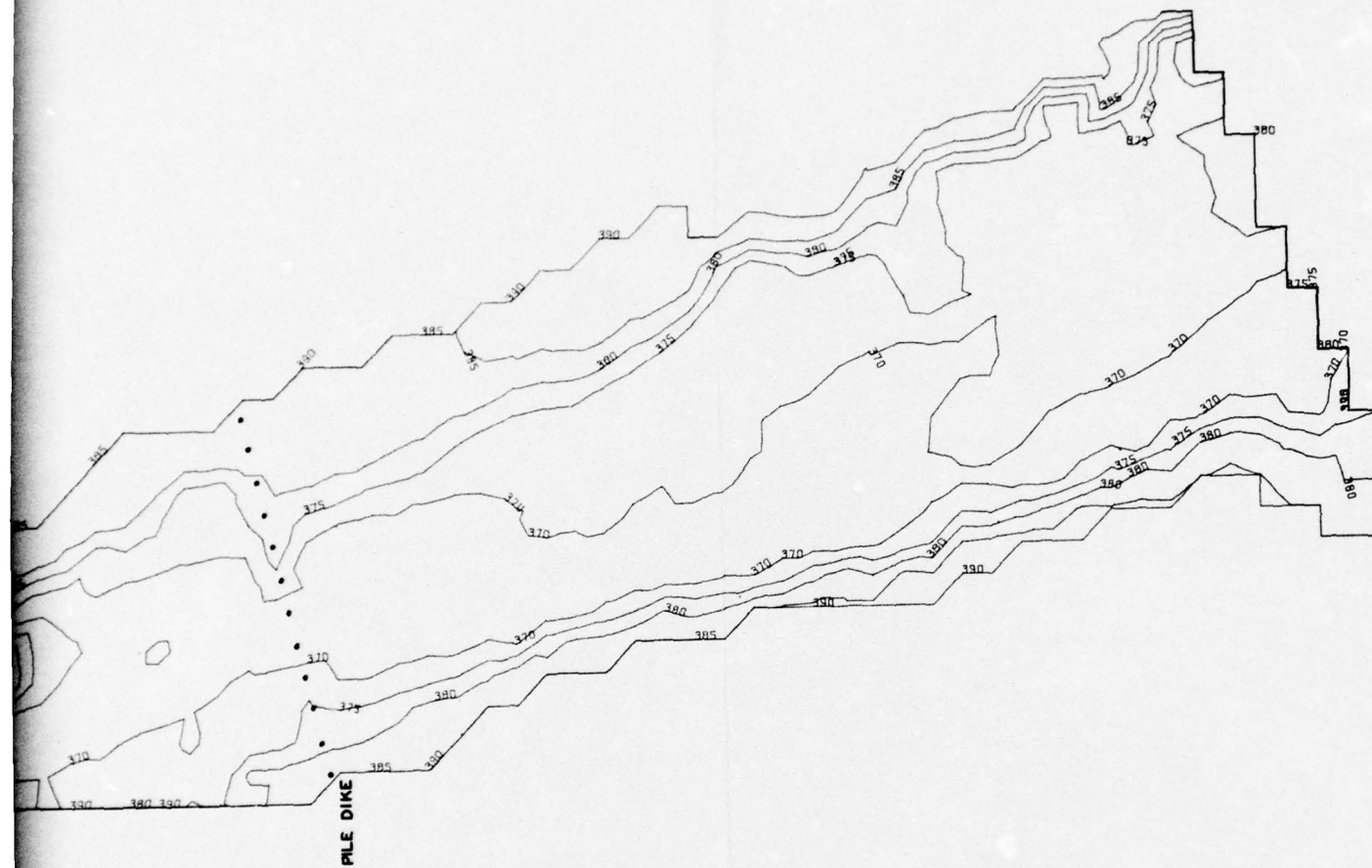
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5 FT

OSBORNE

23



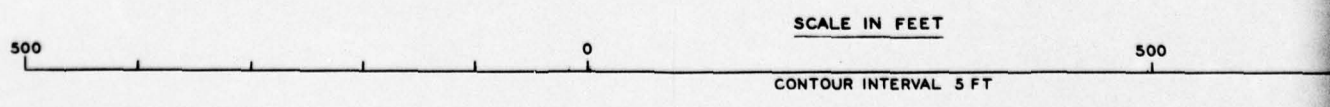
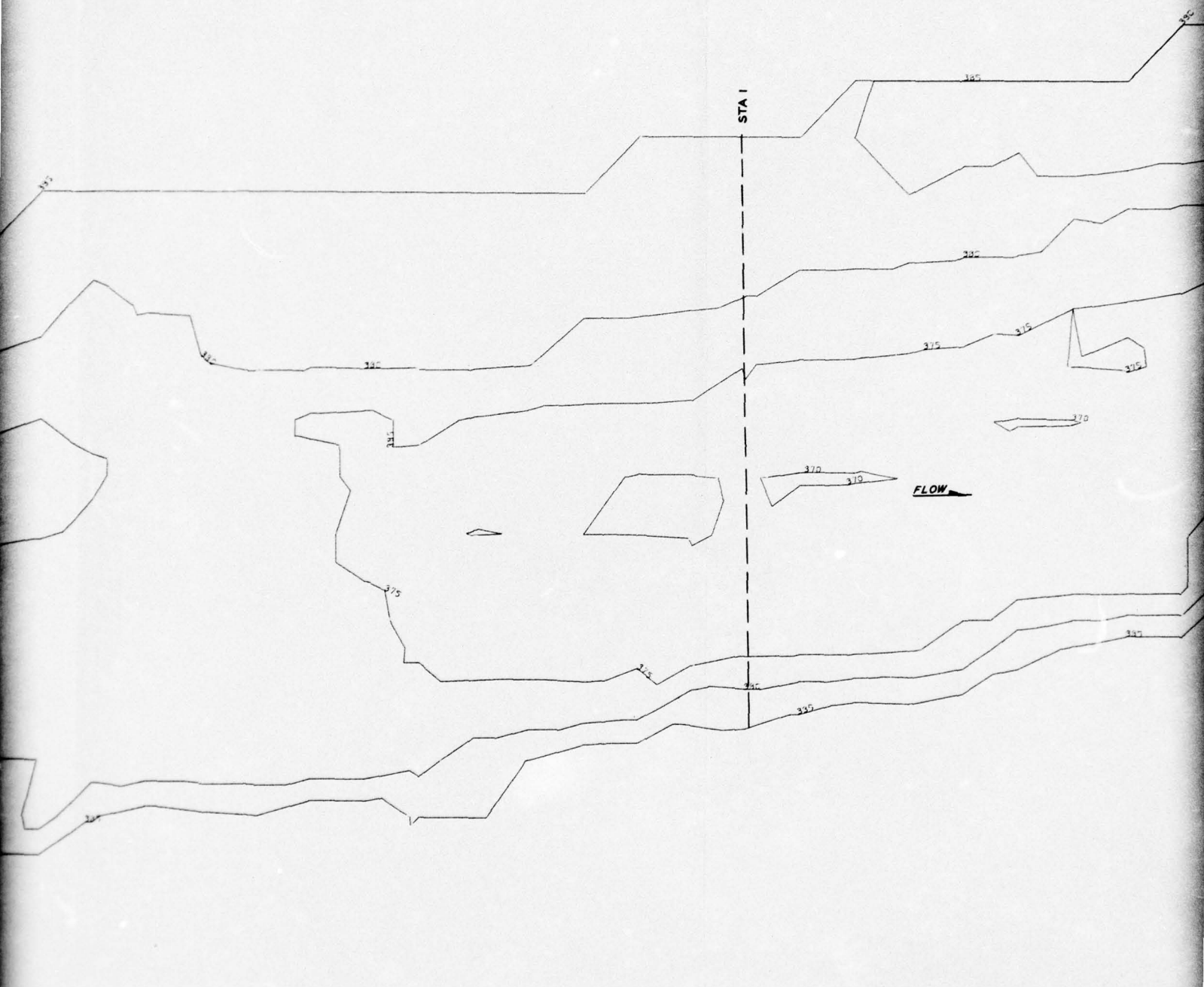
MAP II-3

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ROCK DIKE

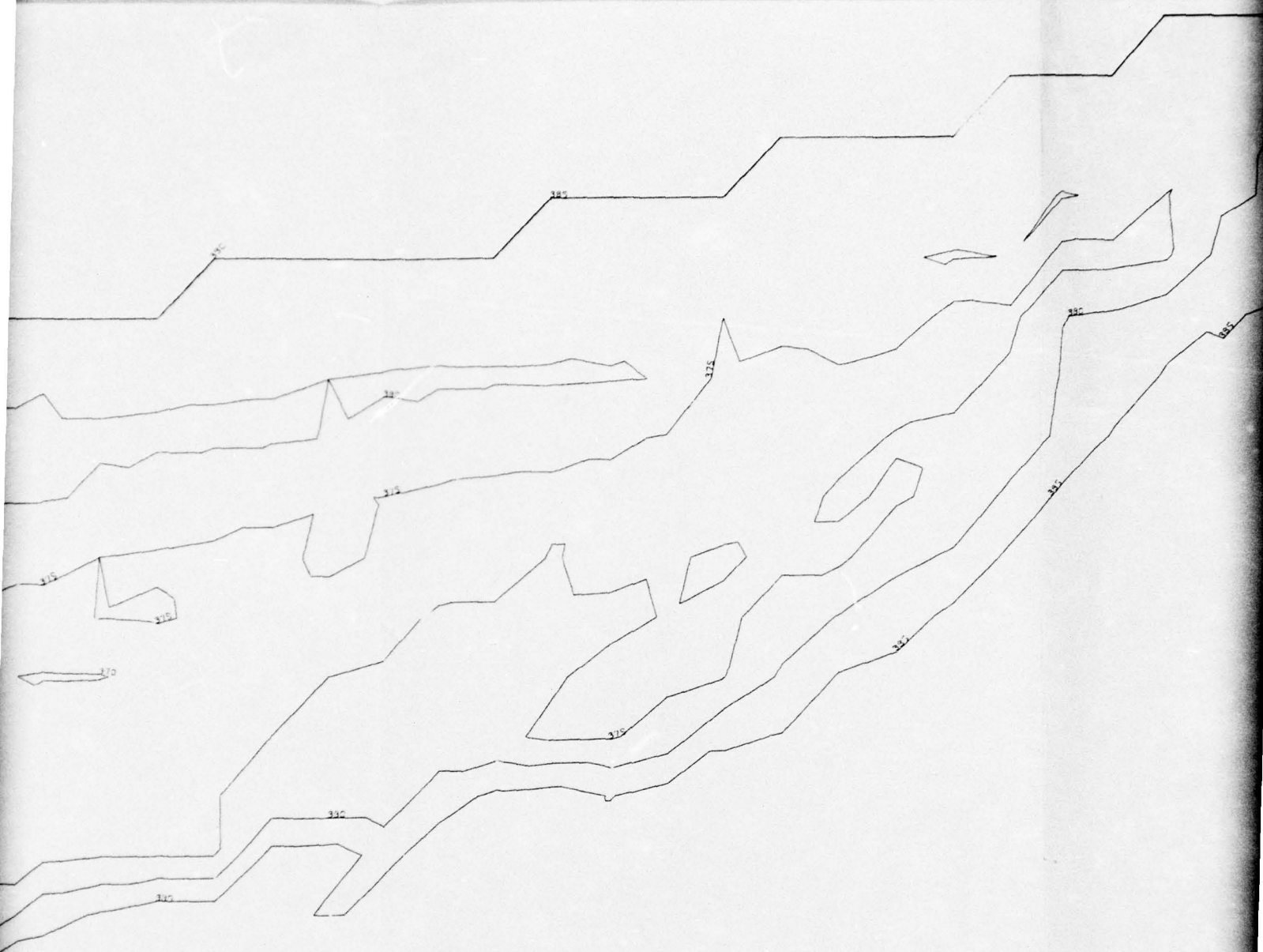
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SIDE CHANNEL HARLOW

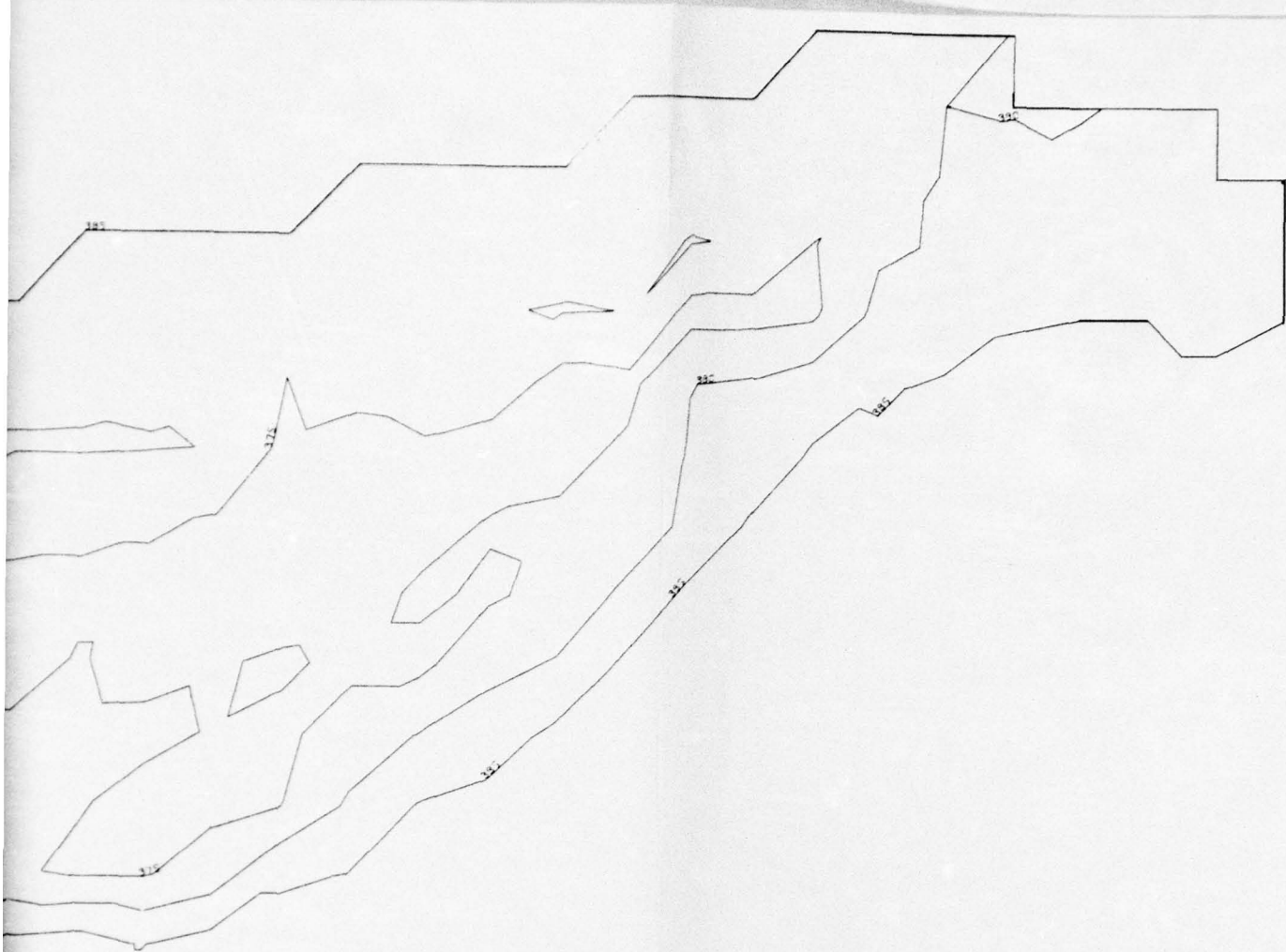


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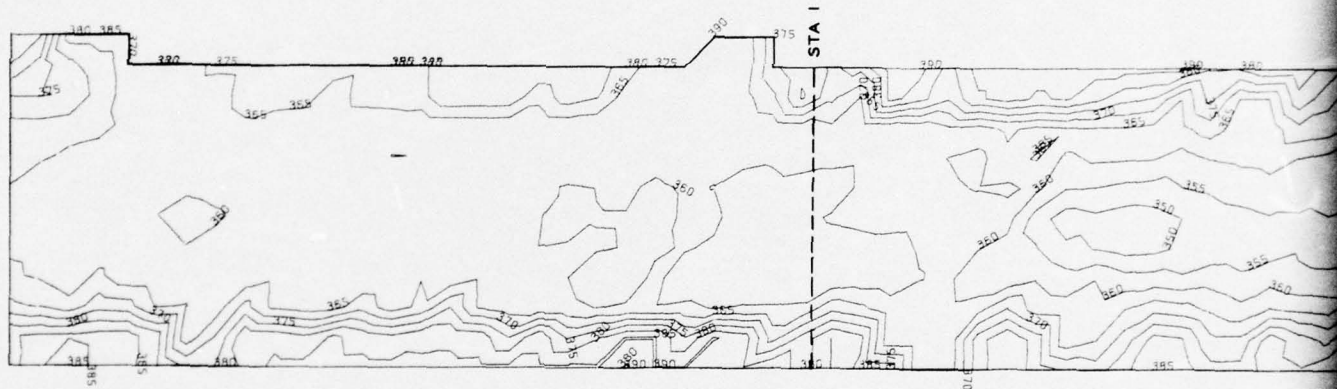
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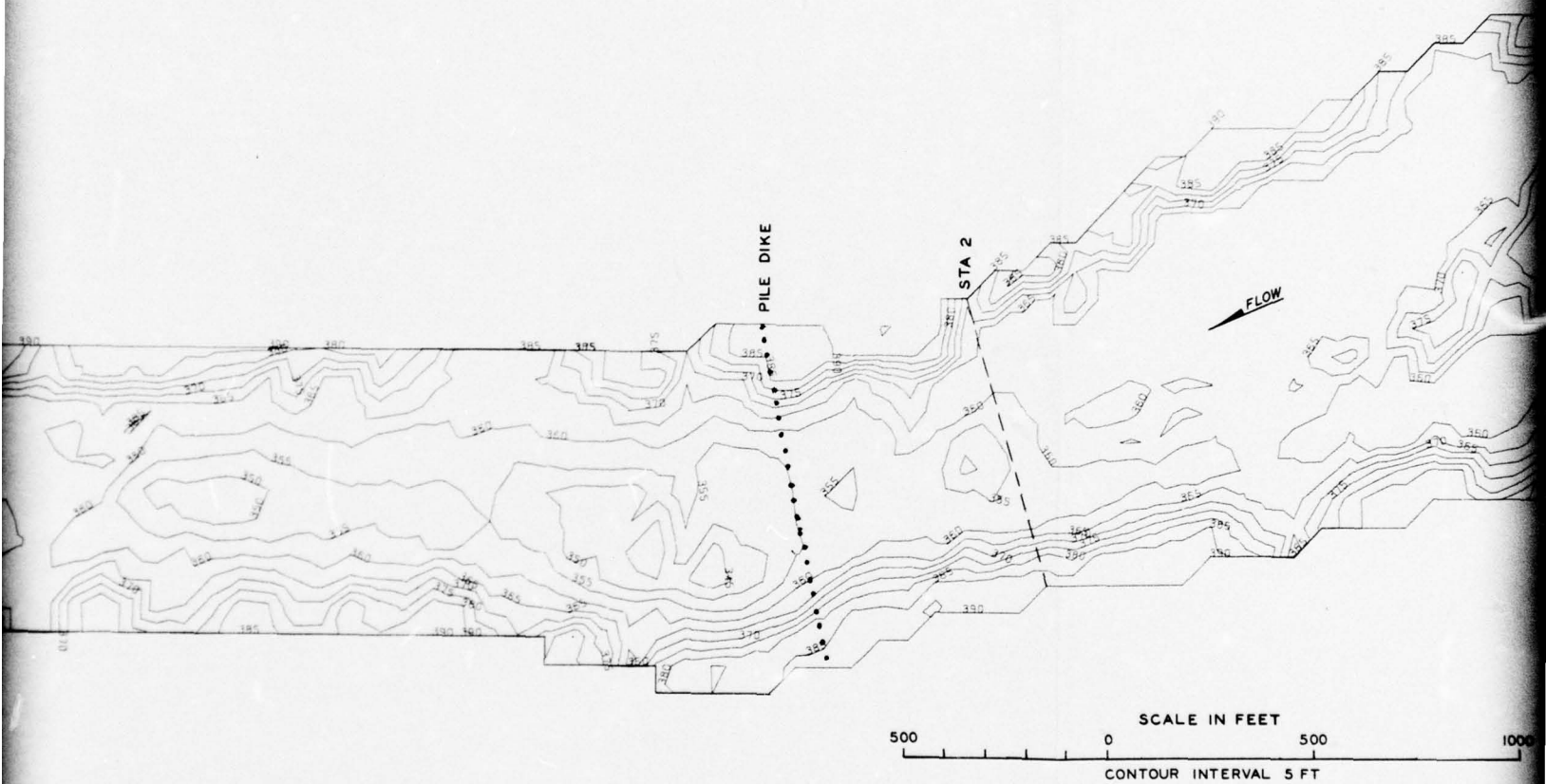
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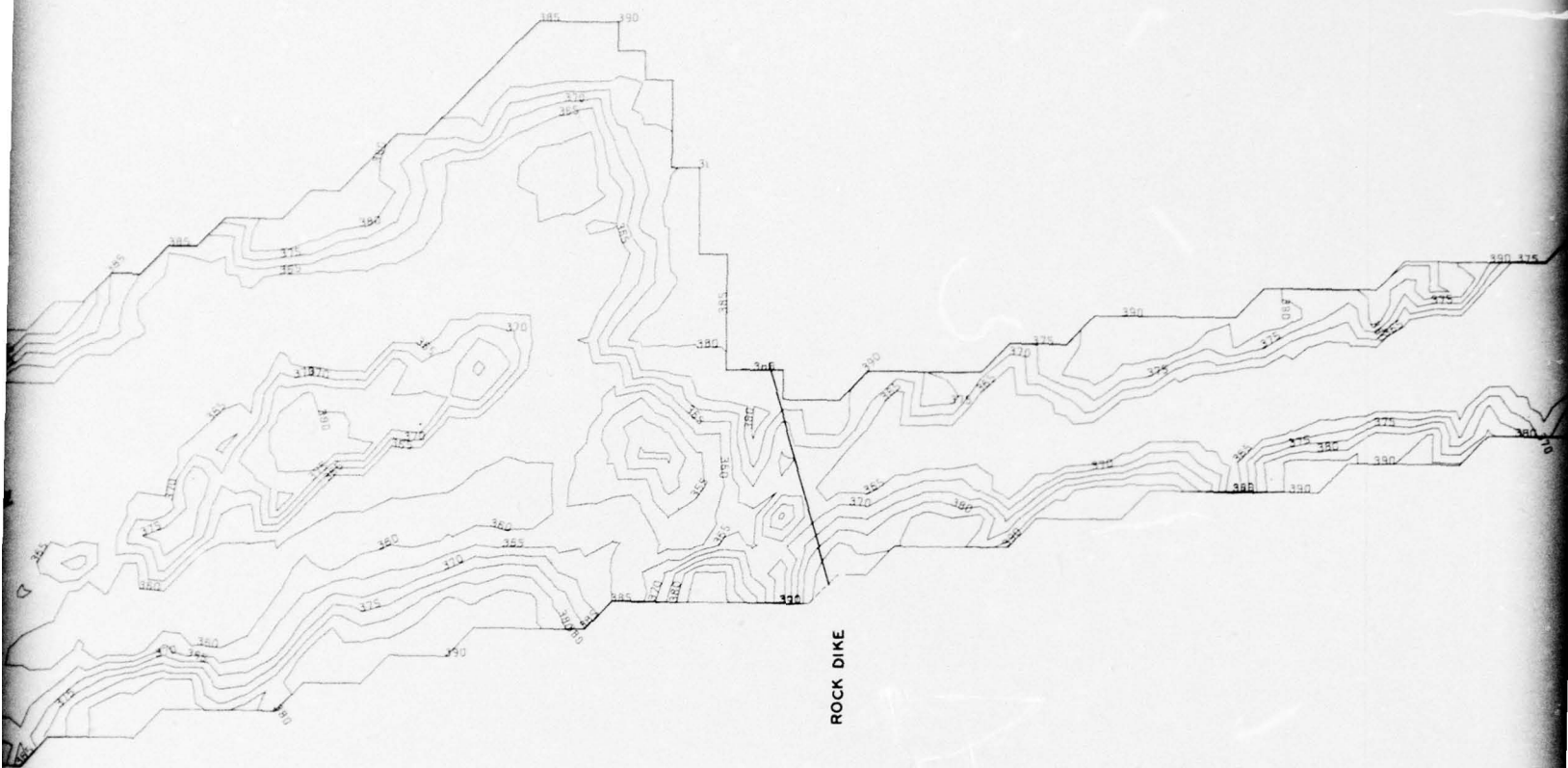


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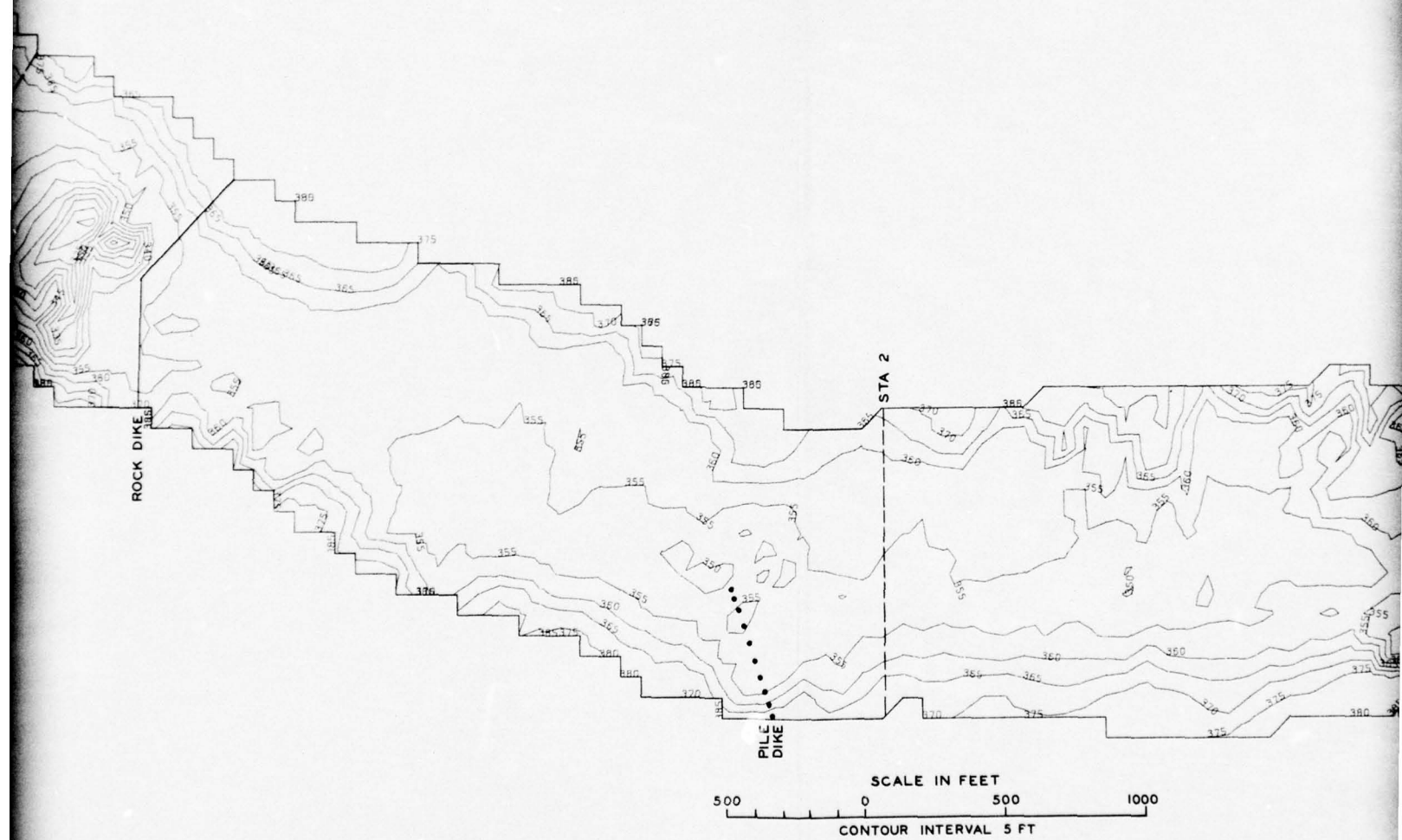


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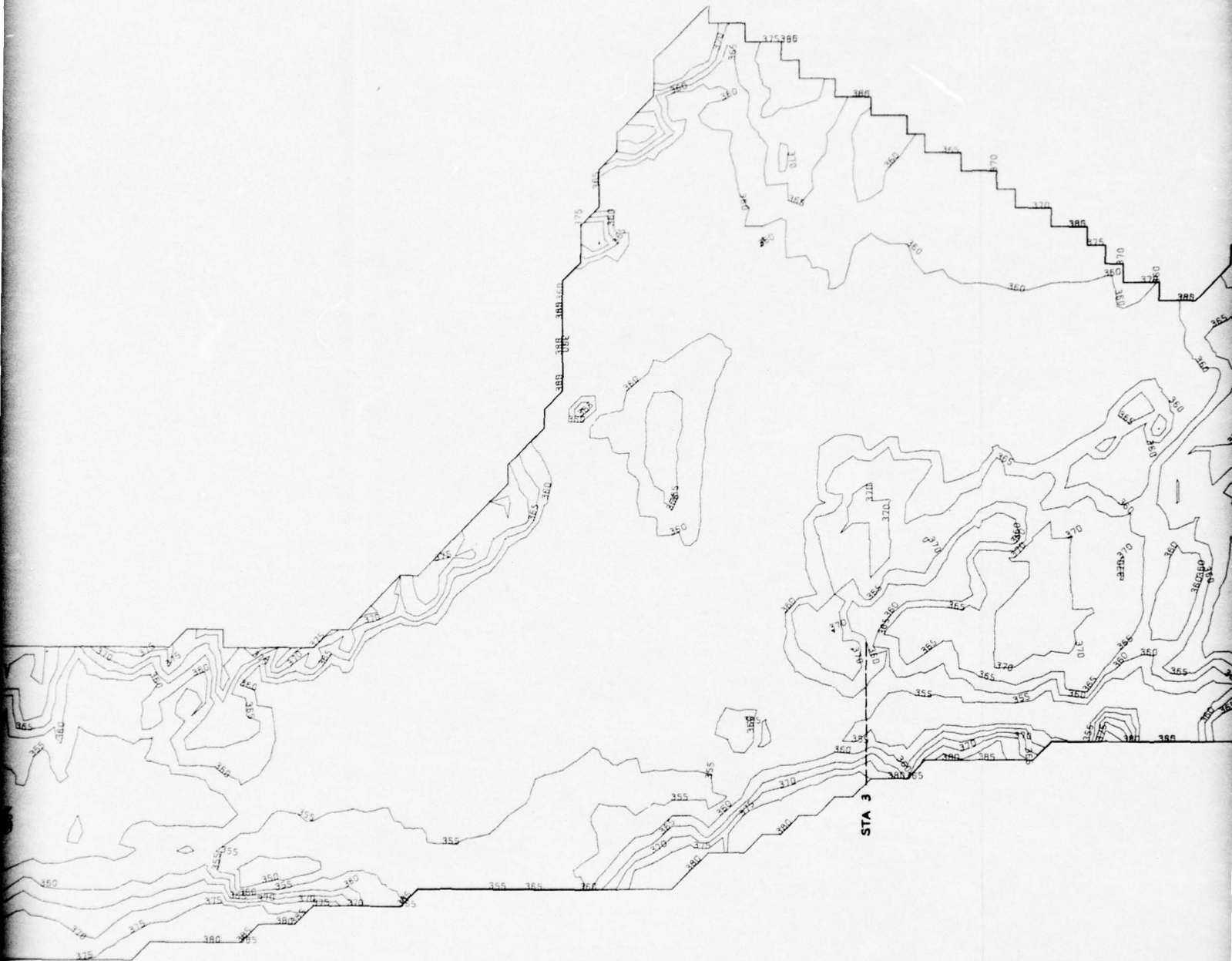
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SIDE CHANNEL MORO

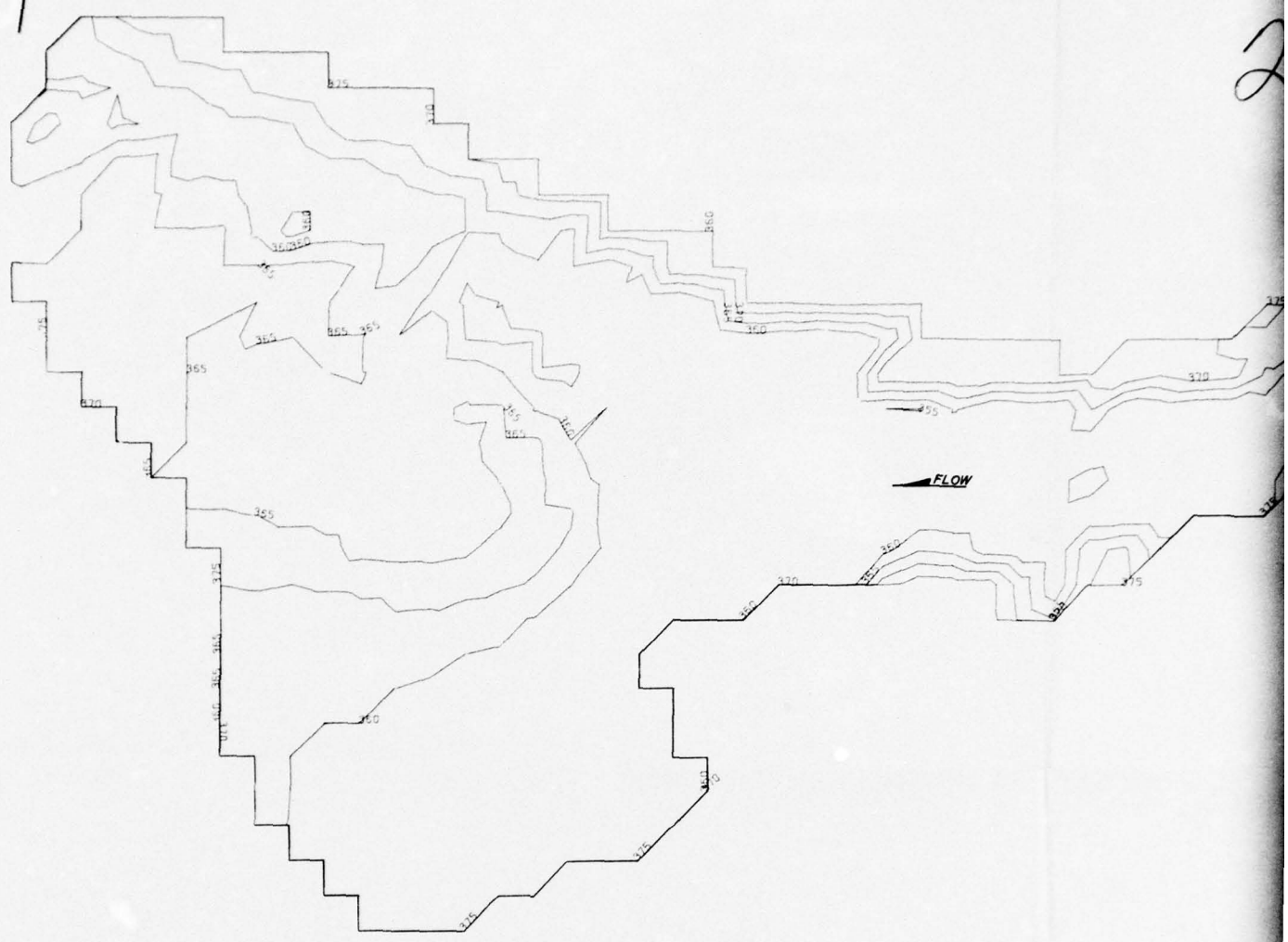


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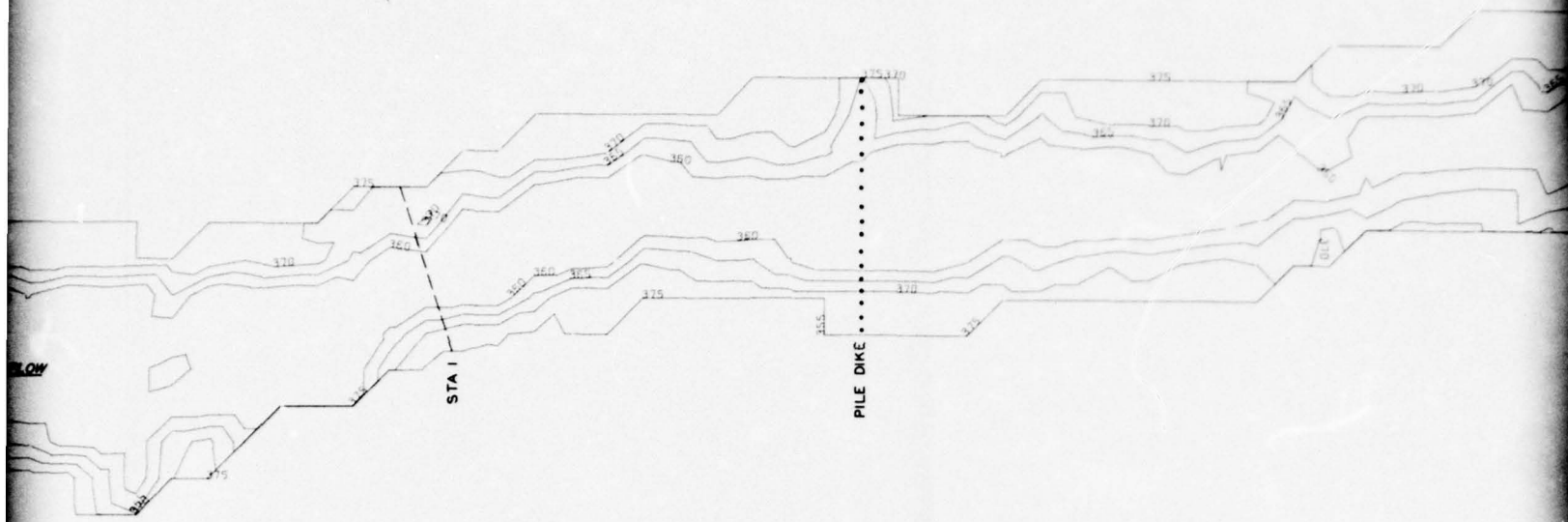


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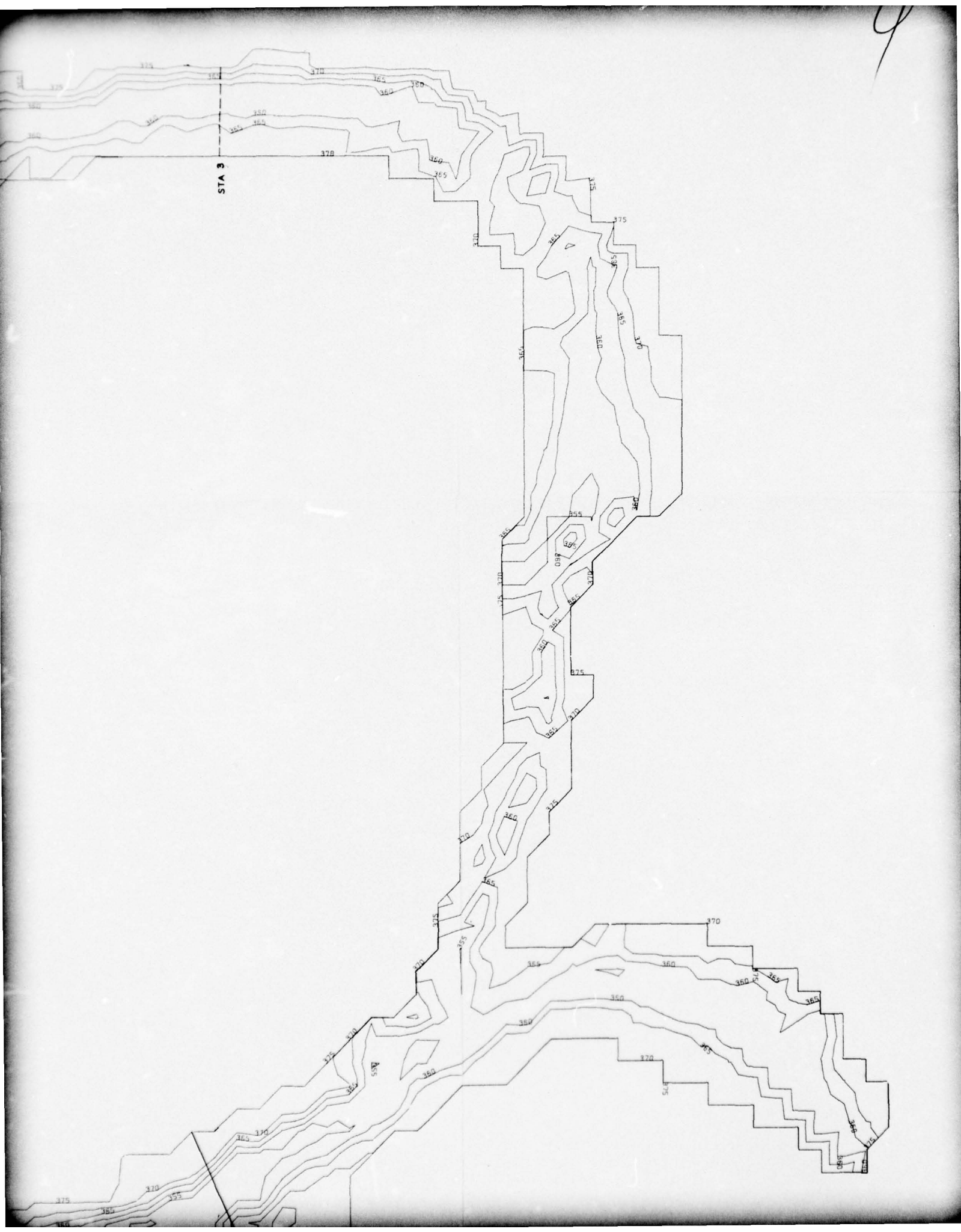


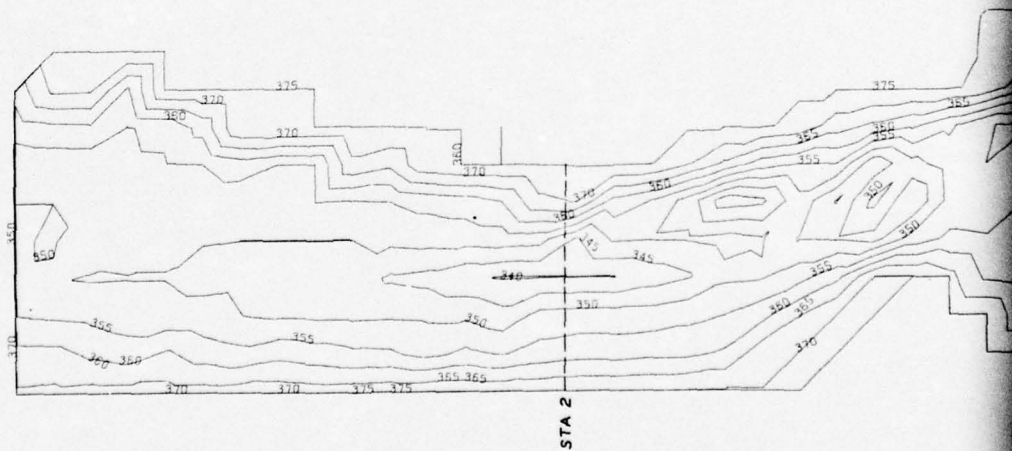
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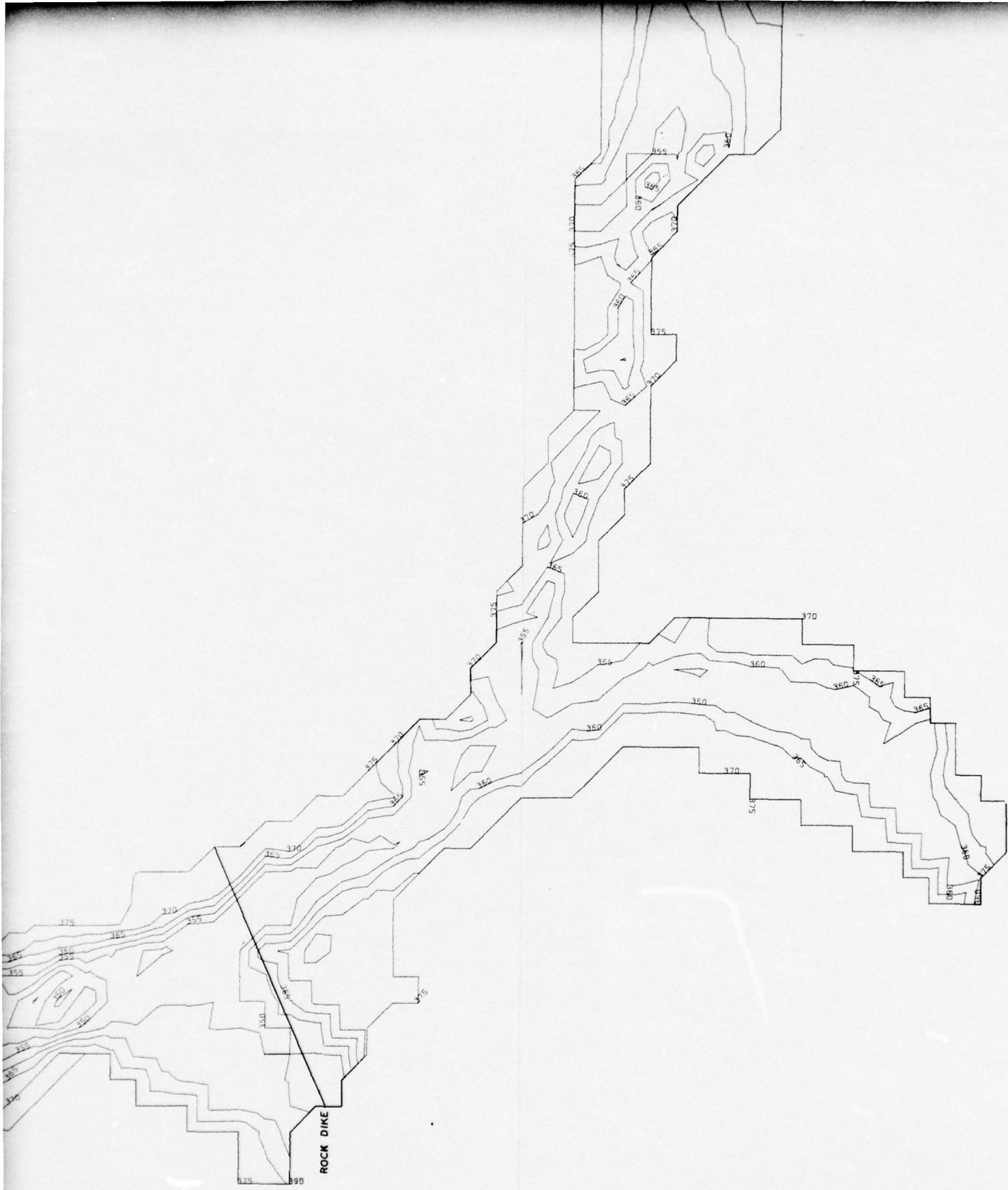
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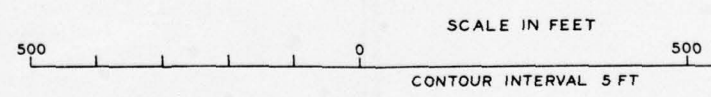
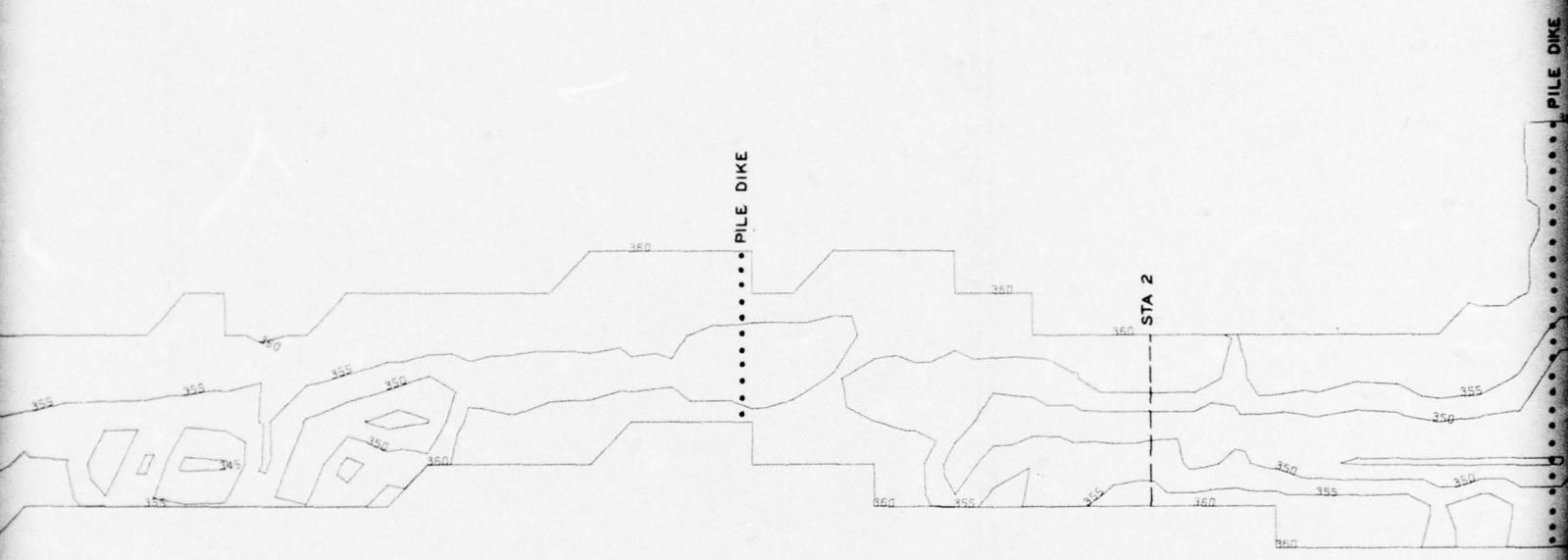




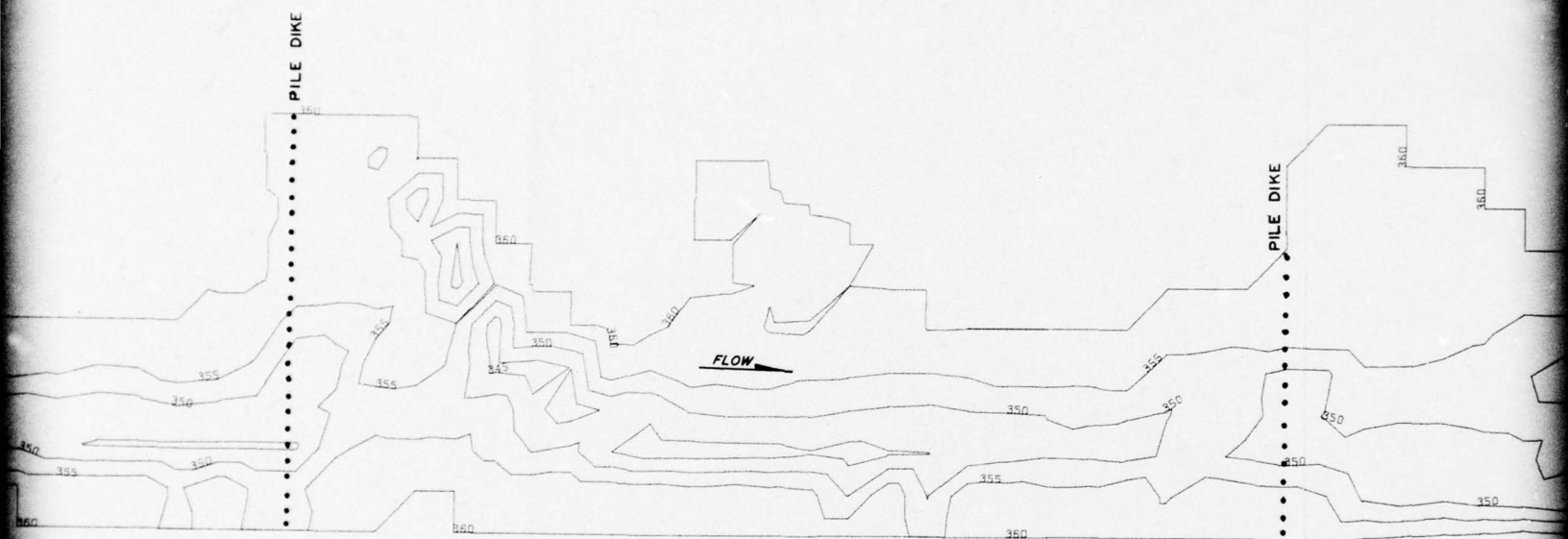
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SIDE CHANNEL KASKASKIA



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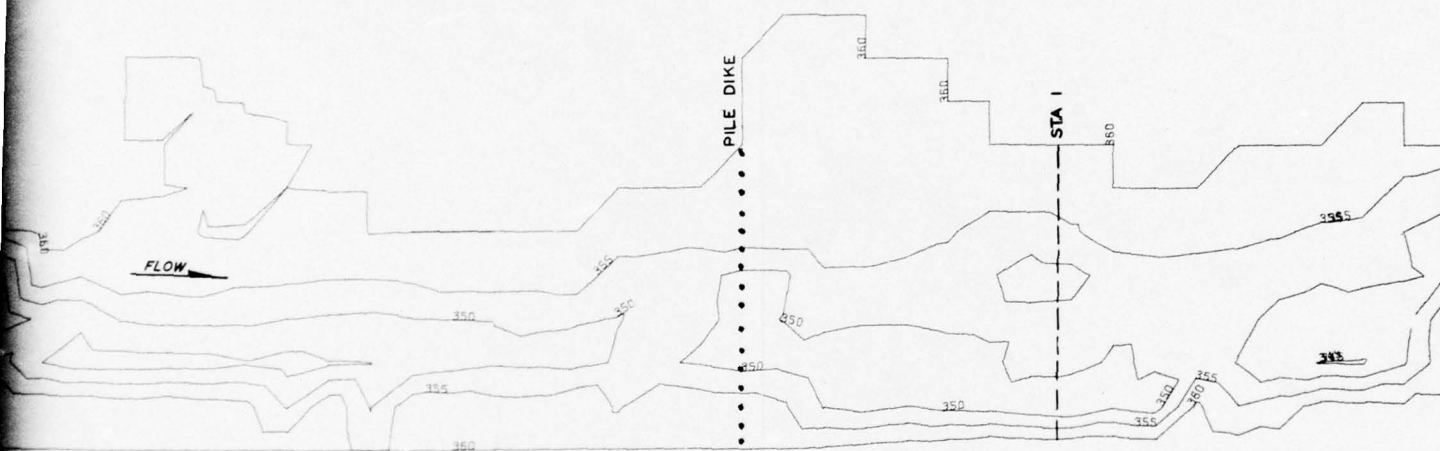


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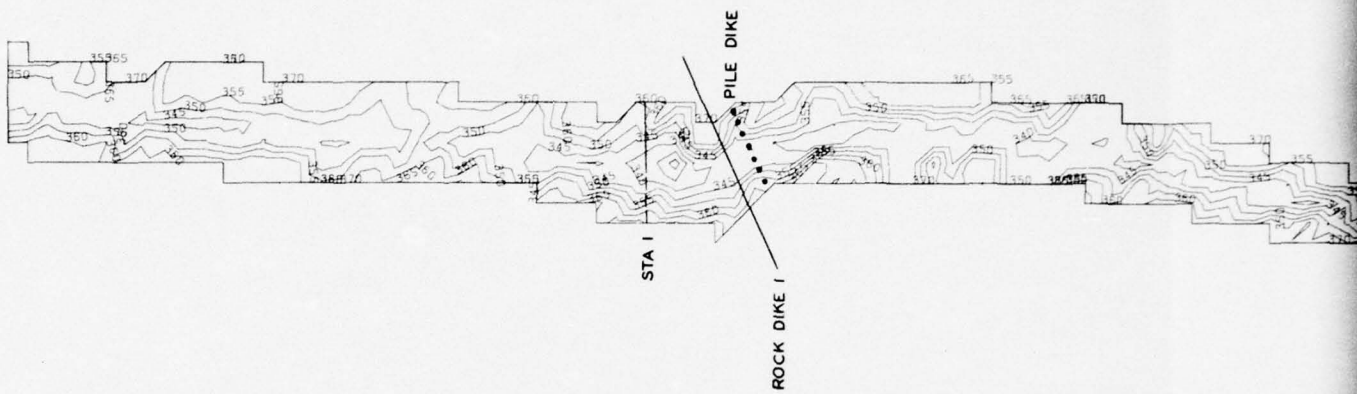
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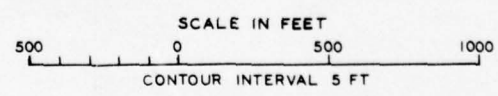
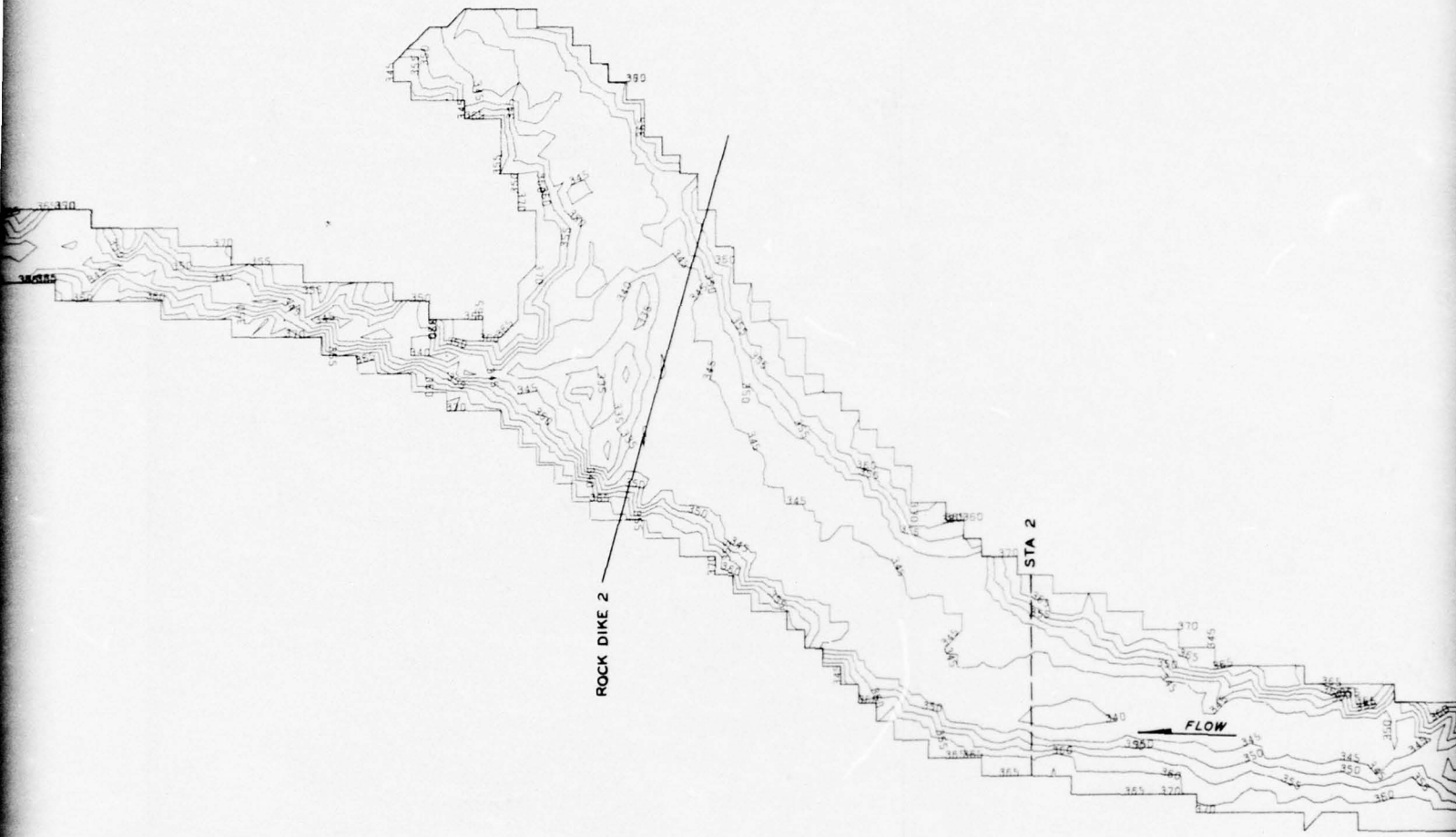
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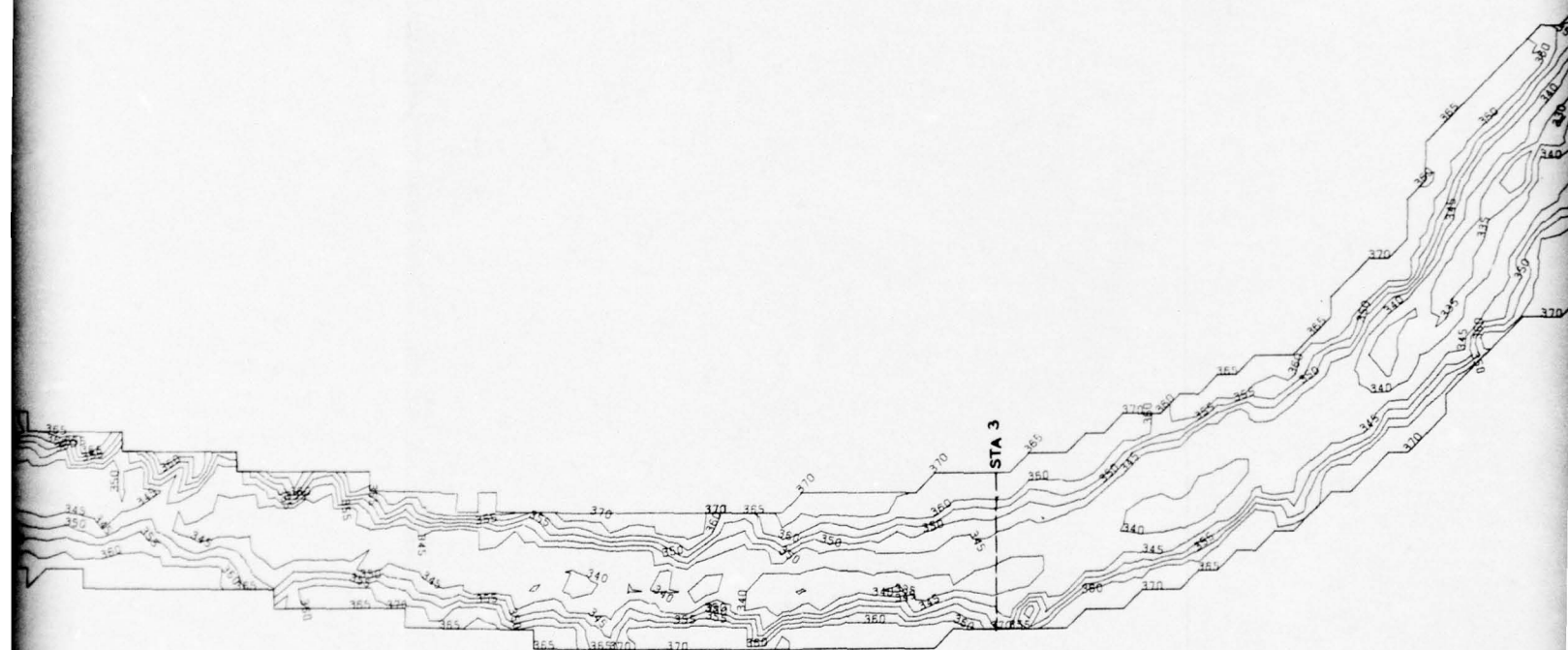
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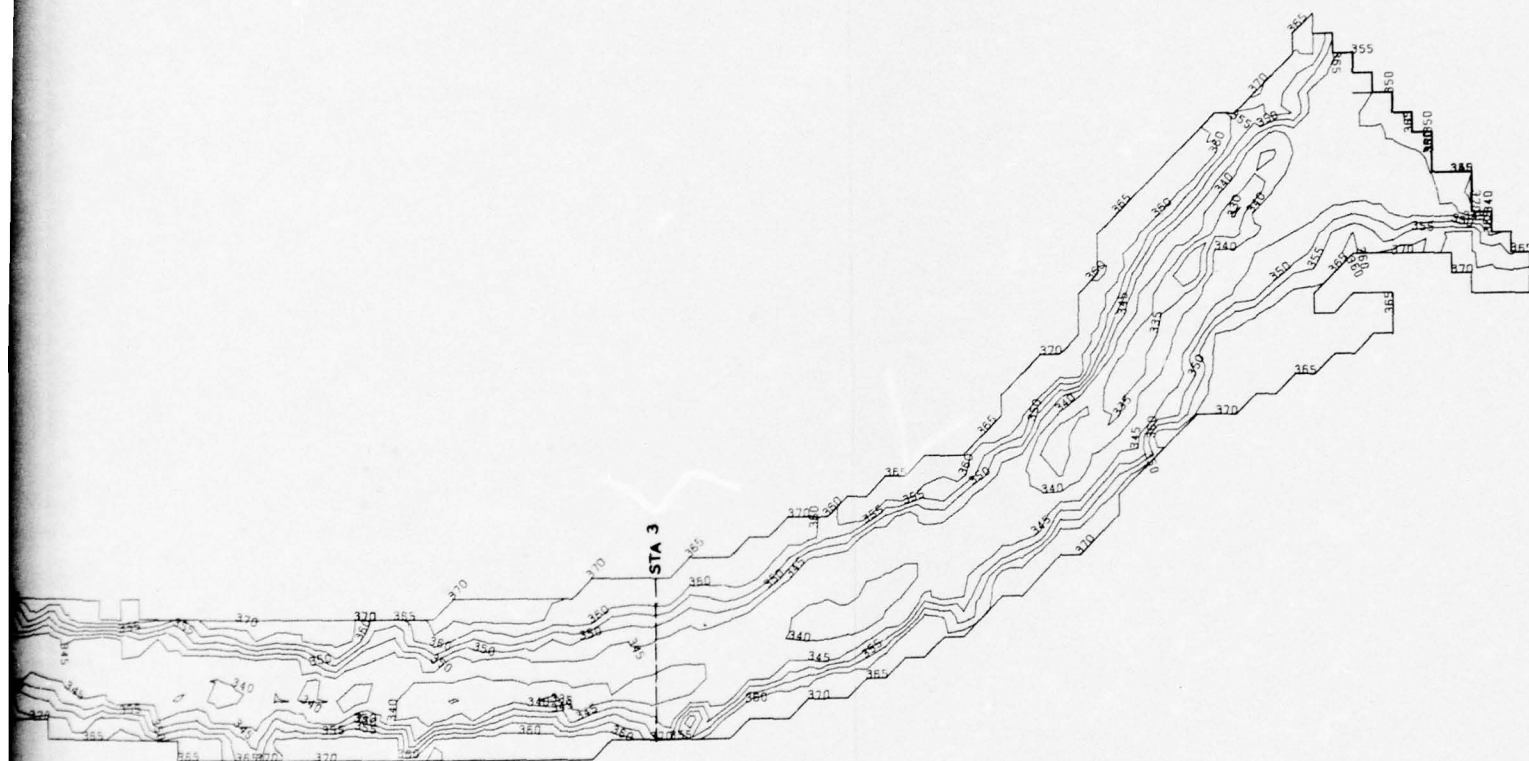


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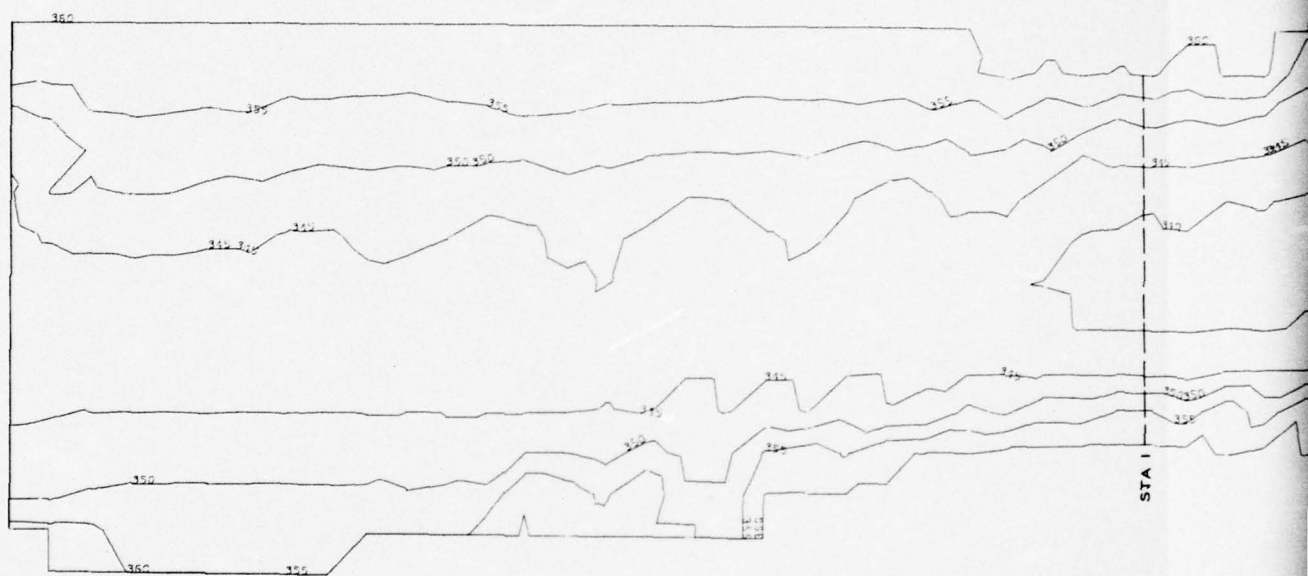


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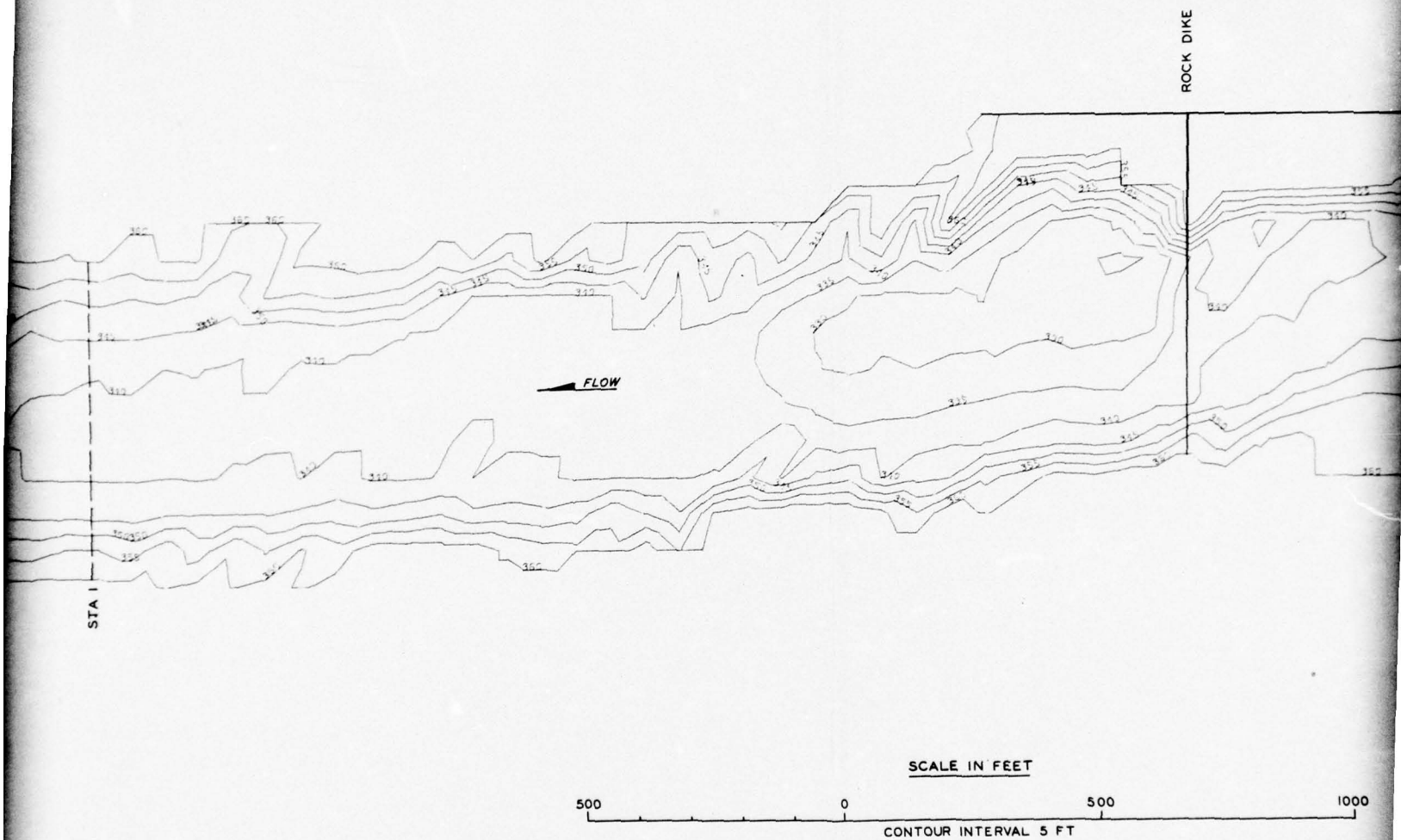


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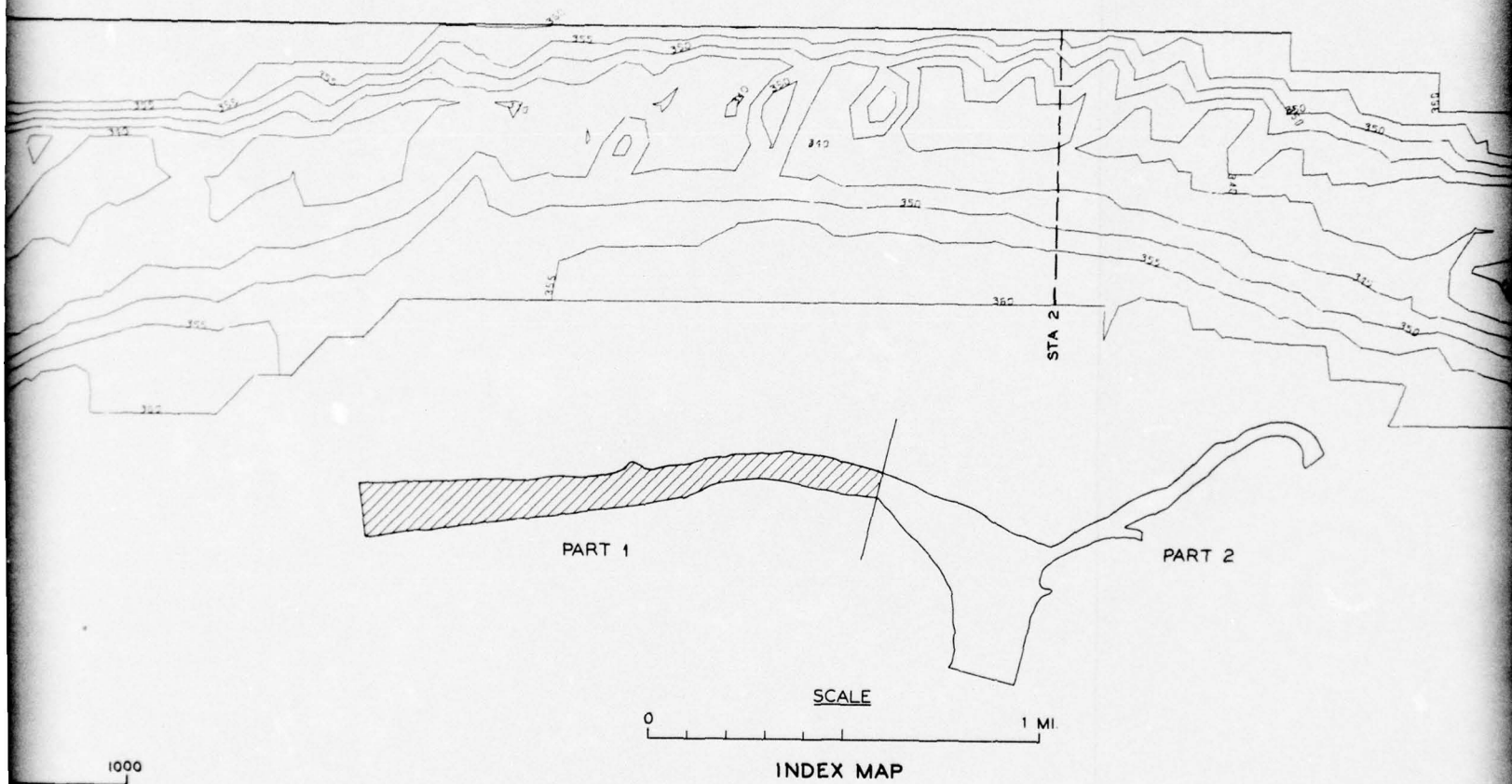


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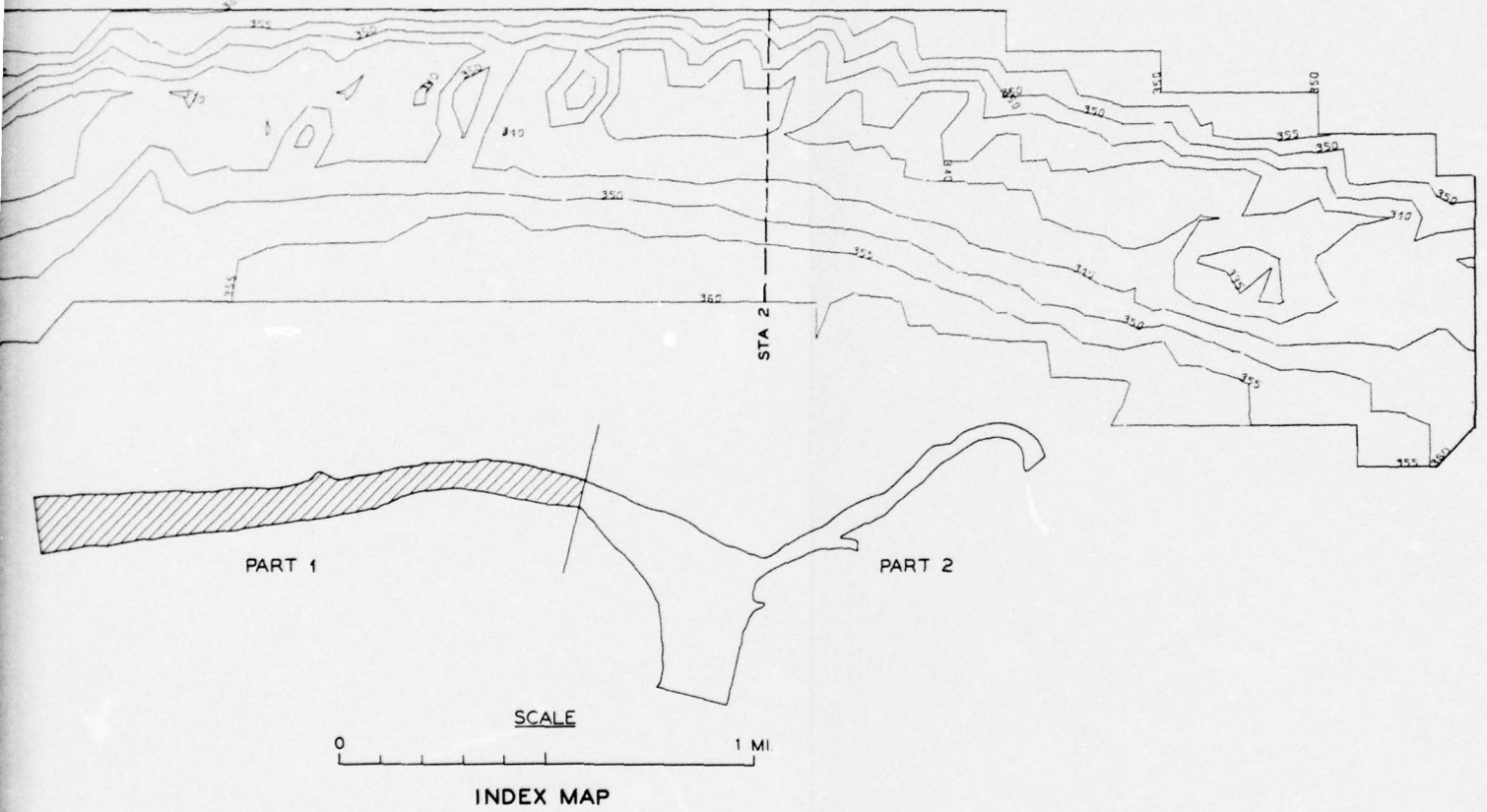


SIDE CHANNEL JONES, PART 1

2



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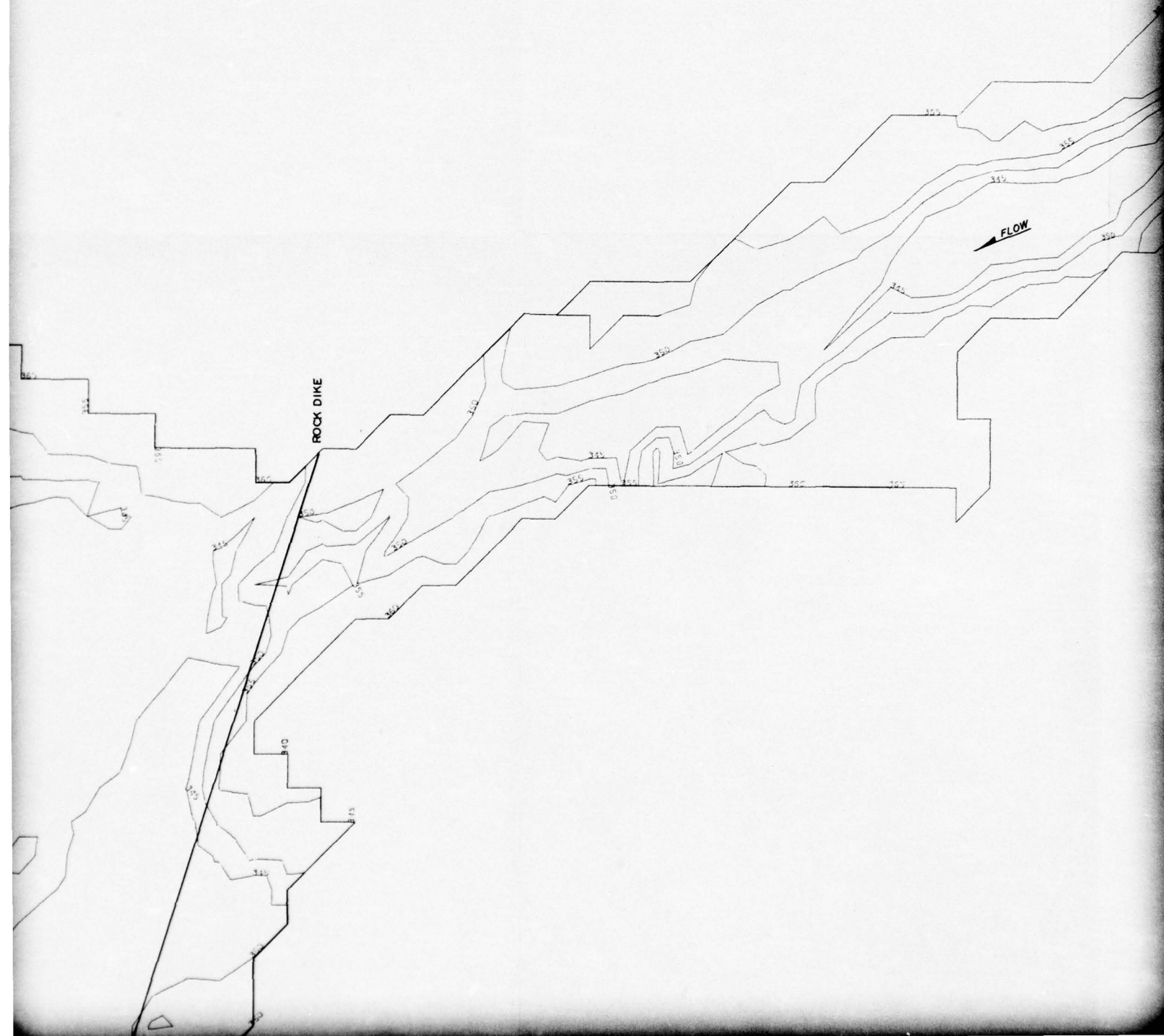


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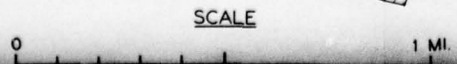
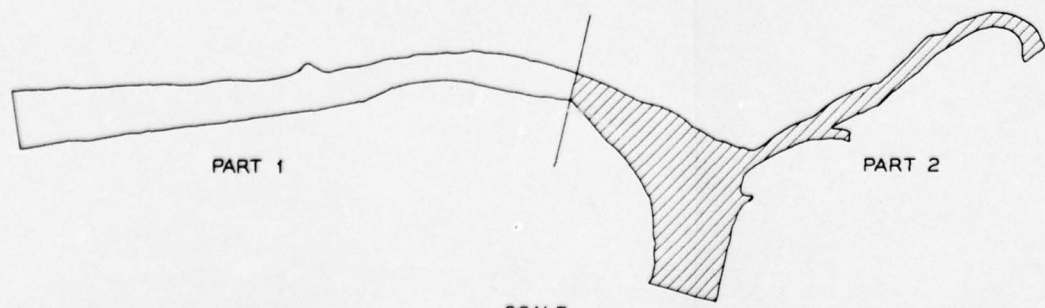
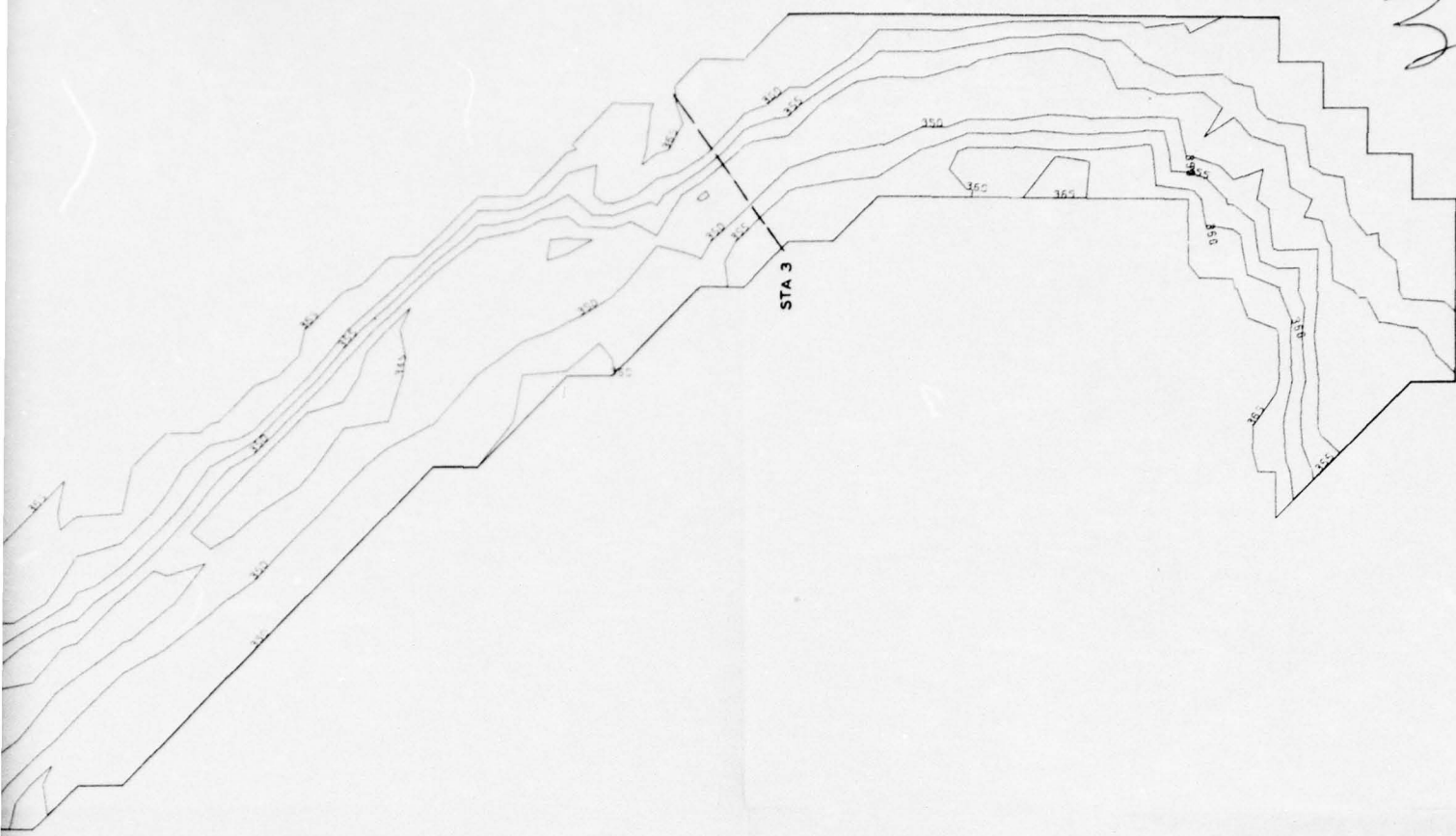
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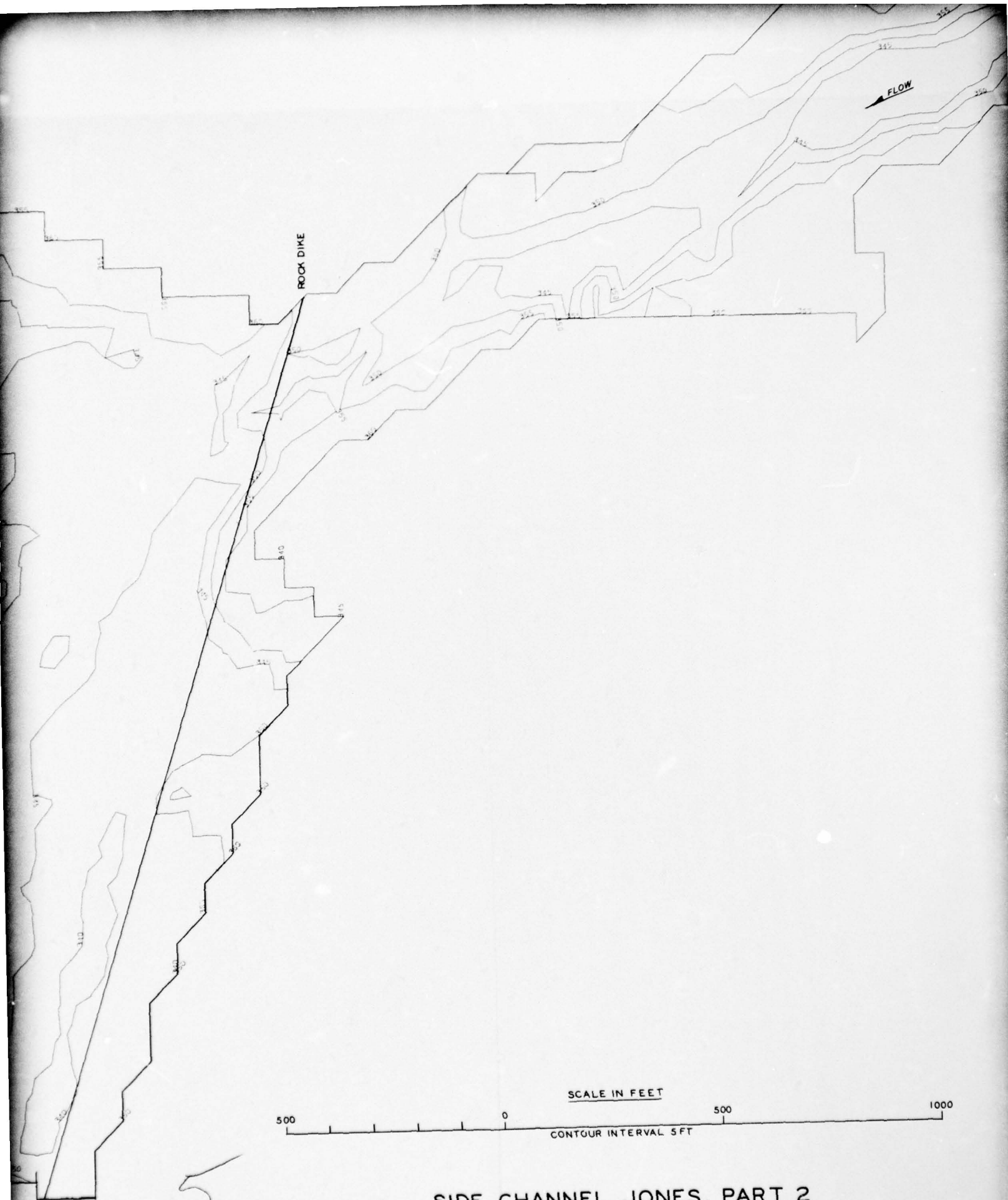
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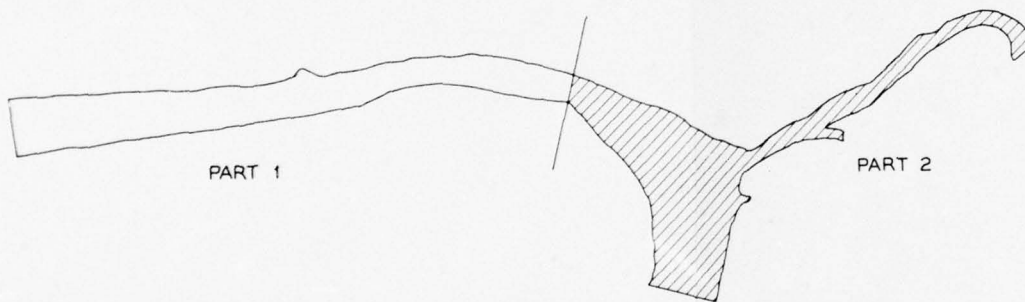
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SIDE CHANNEL JONES, PART 2



PART 1

PART 2

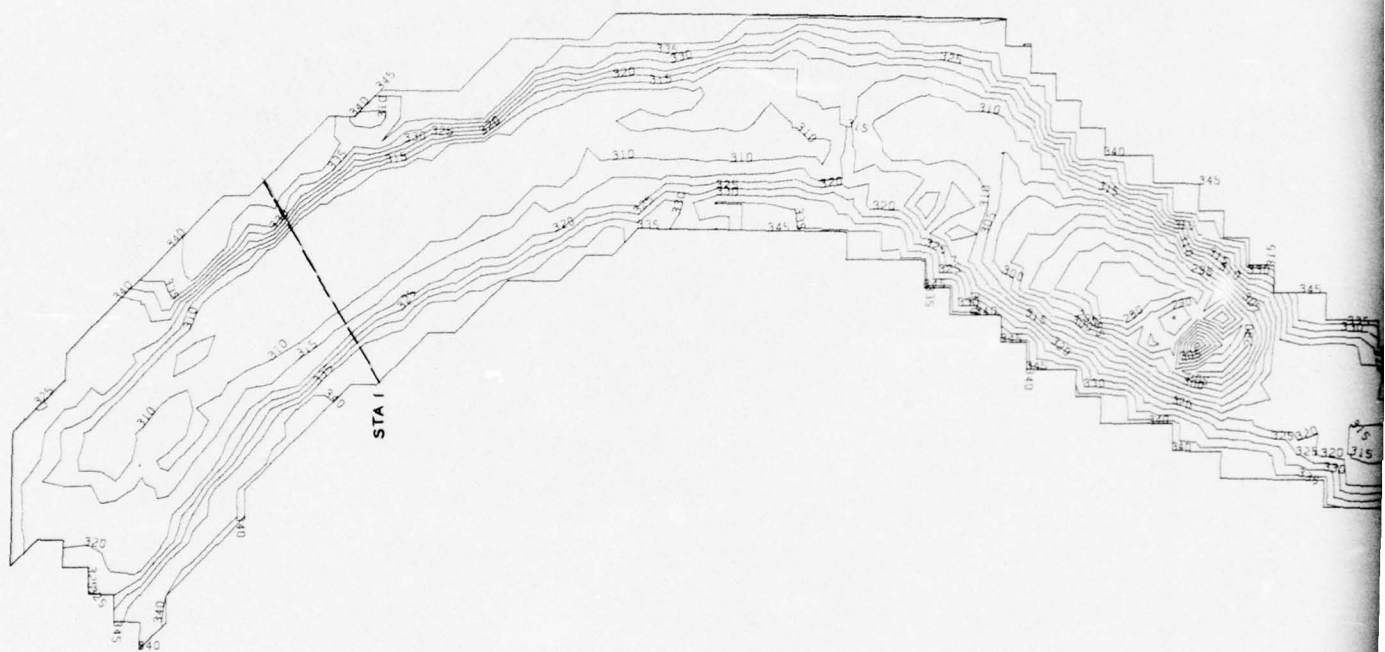
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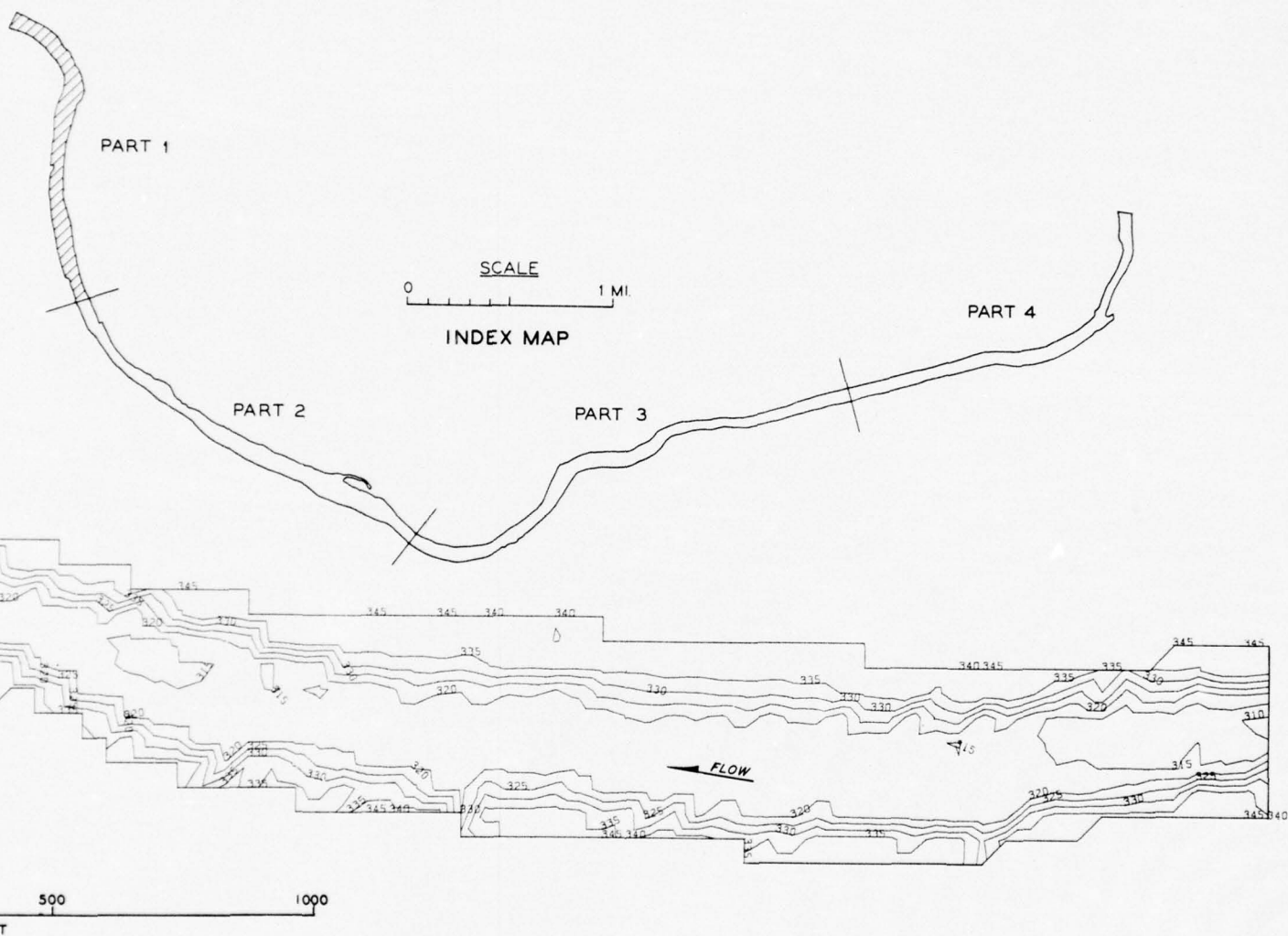
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MAP II-10 b



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SIDE CHAN

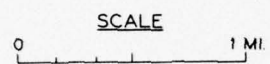


ICAYUNE, PART 1

MAP II-11a

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PART 1

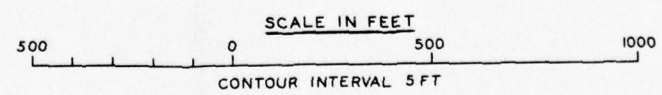
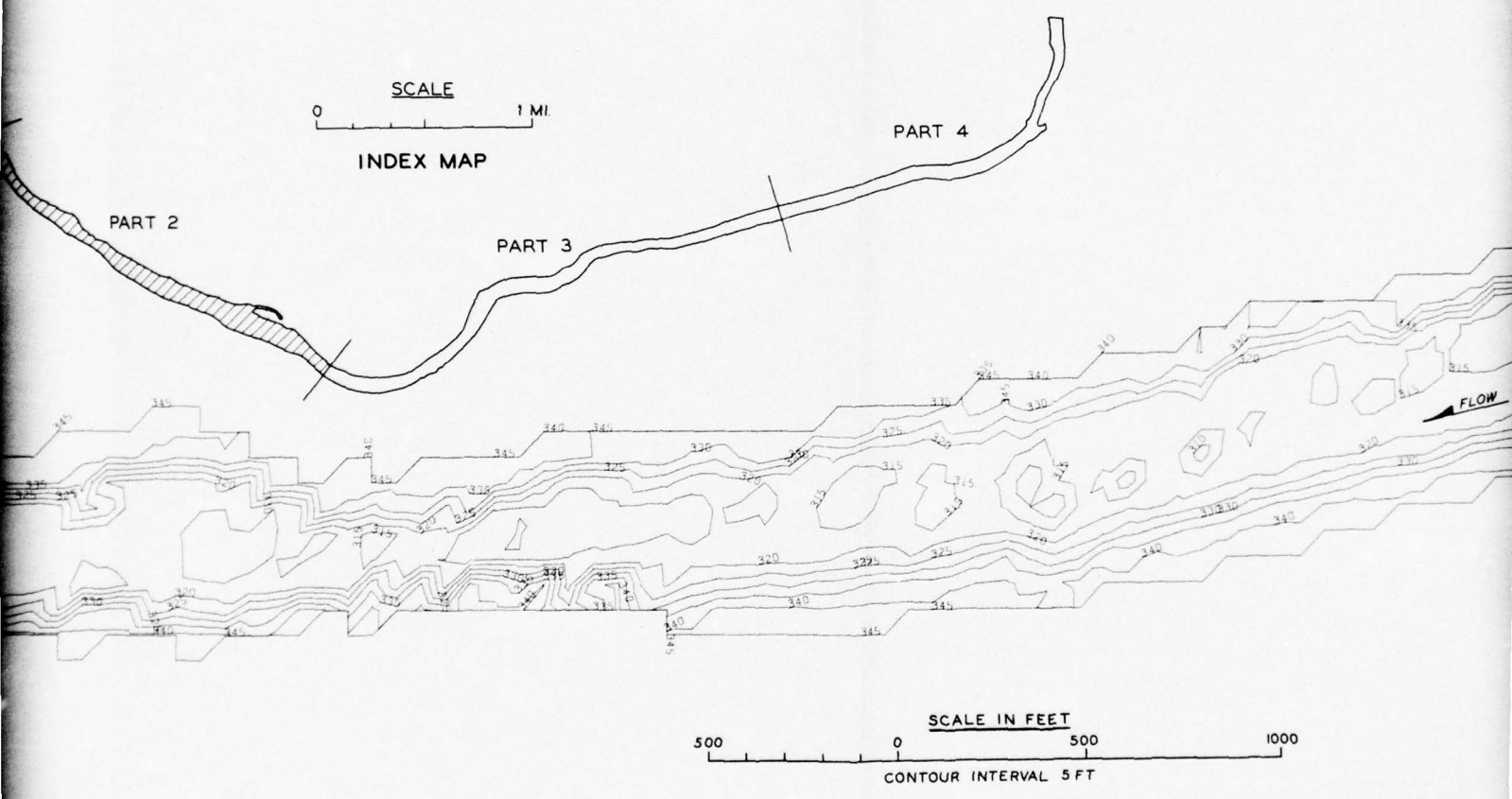


INDEX MAP

PART 4

PART 2

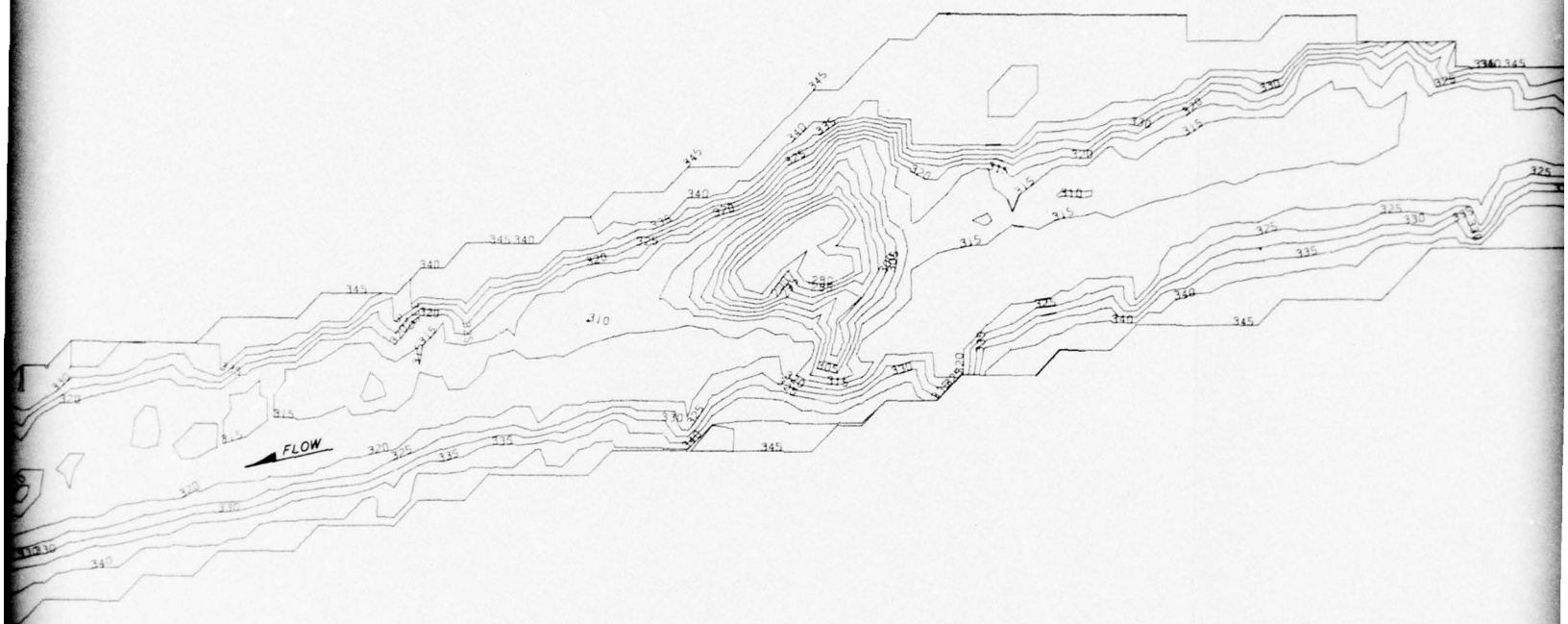
PART 3



SIDE CHANNEL PICAYUNE, PART 2

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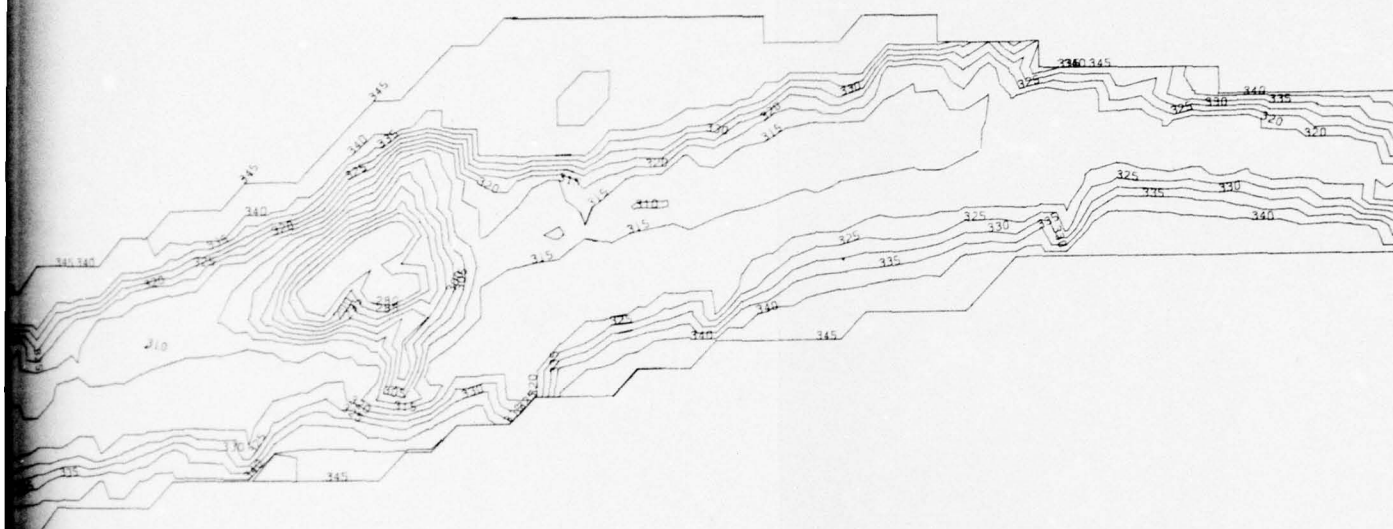
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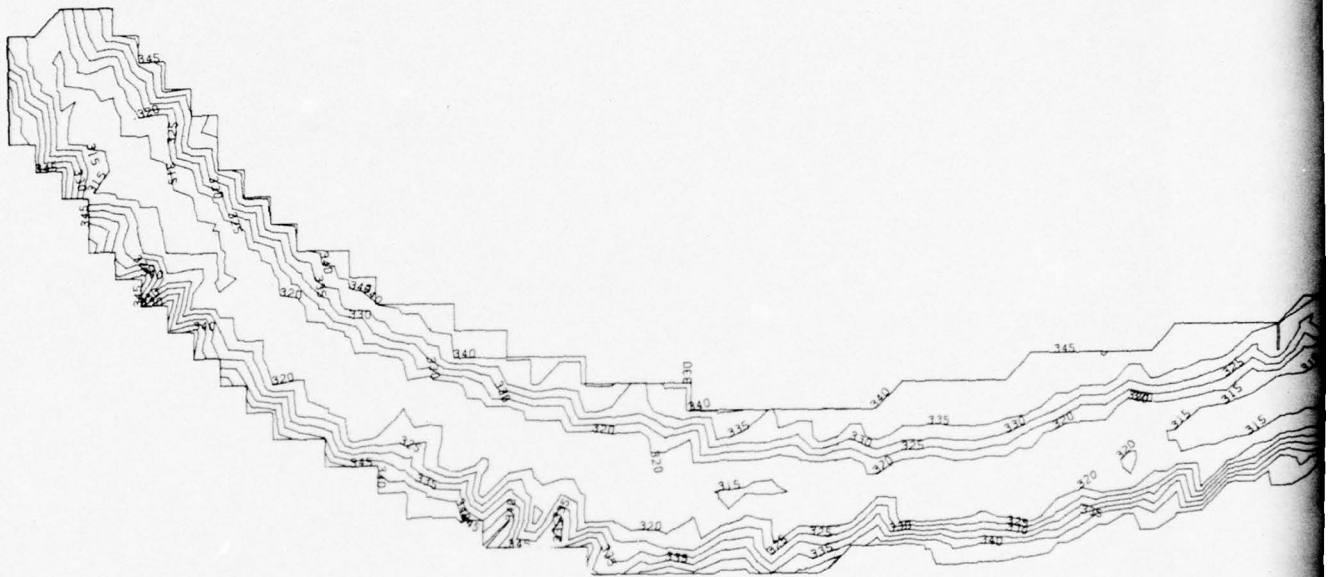
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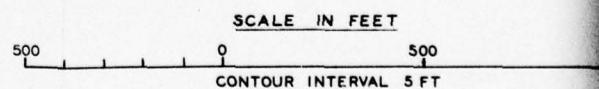
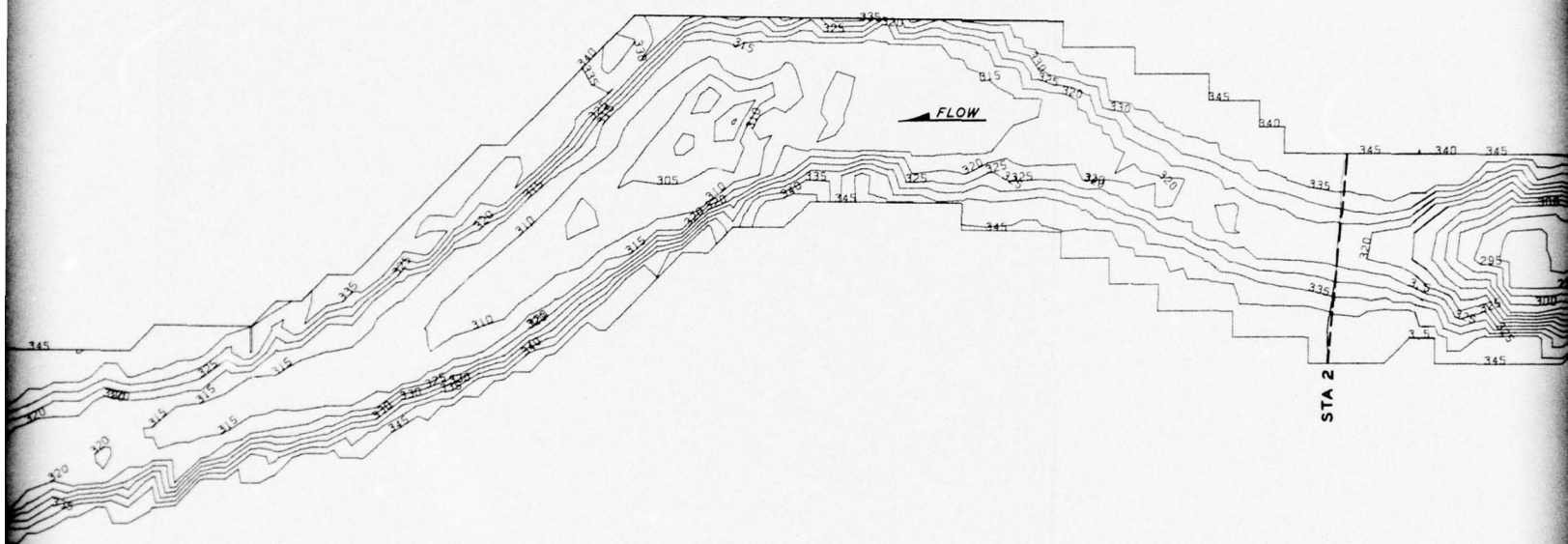
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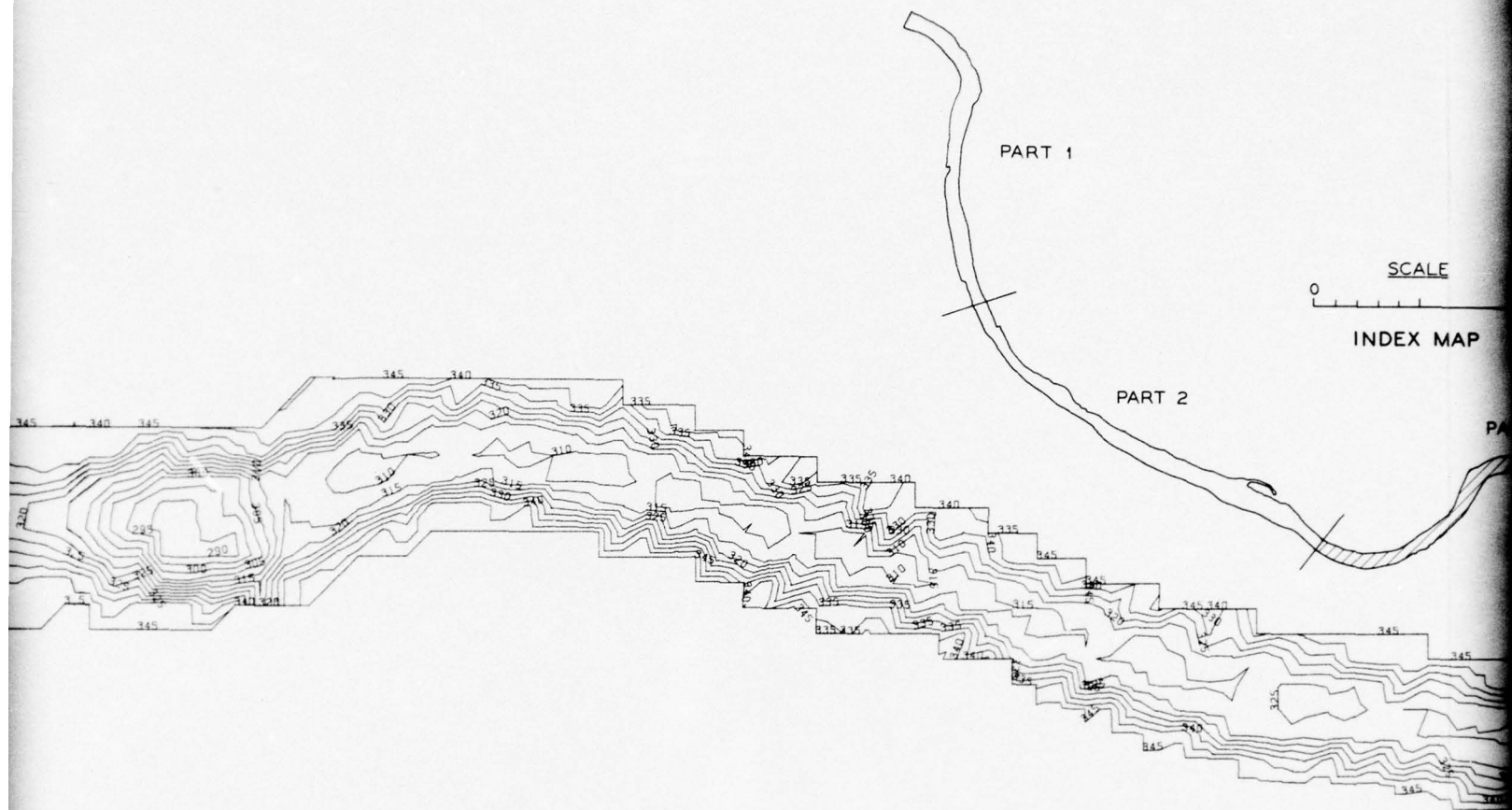
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01



SIDE CHANNEL PICAYUNE, PAR

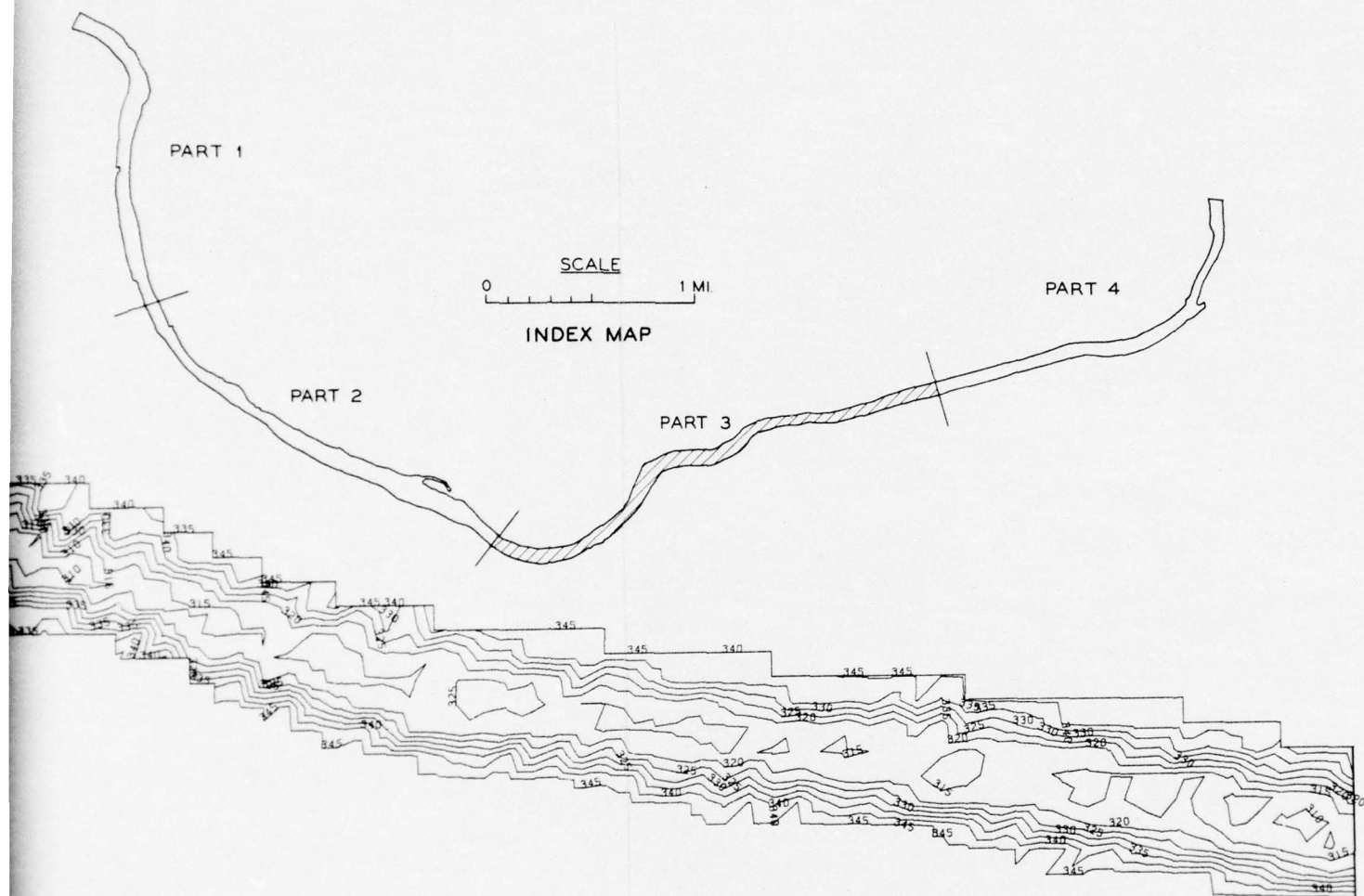
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ET
500
1000
AL 5 FT

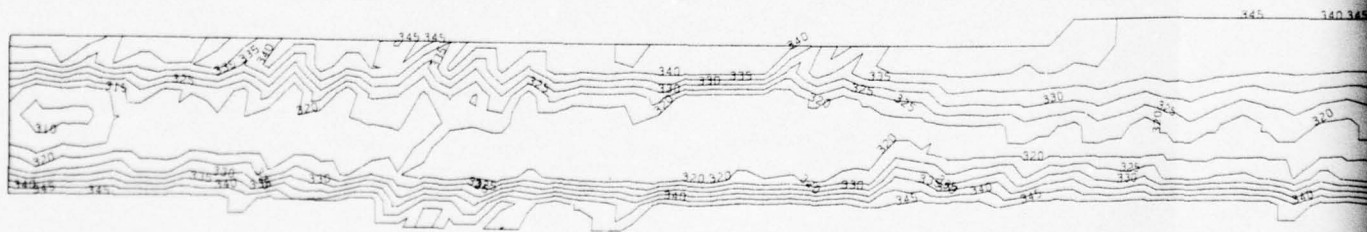
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MAP II-11c

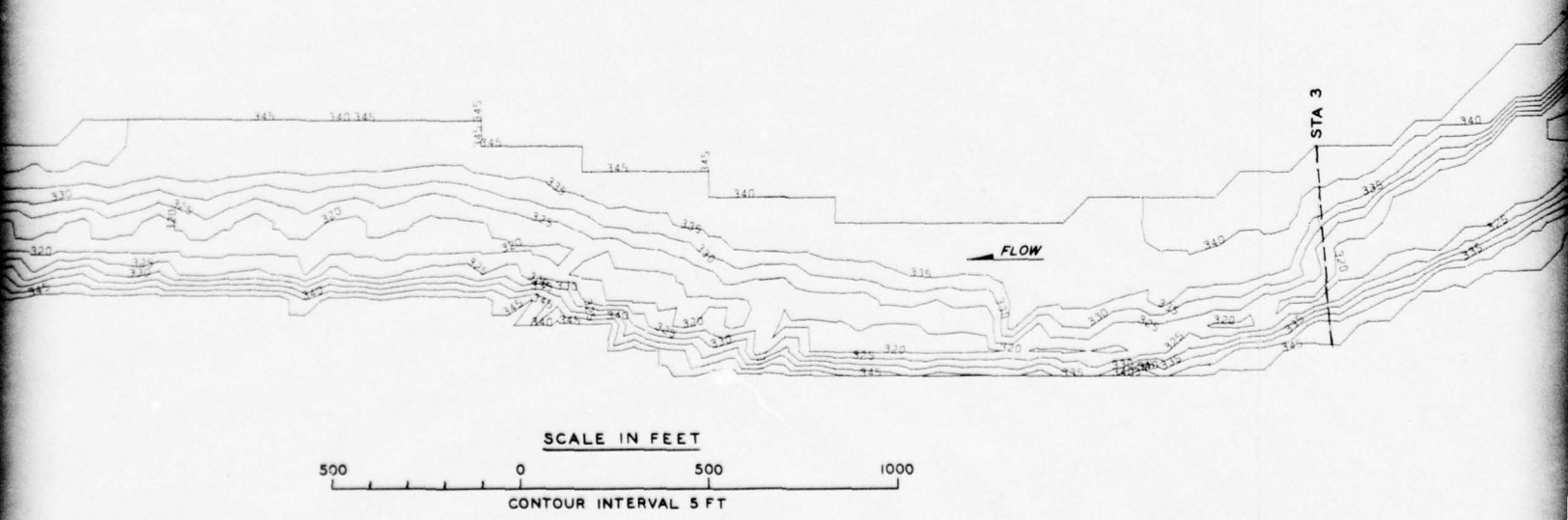
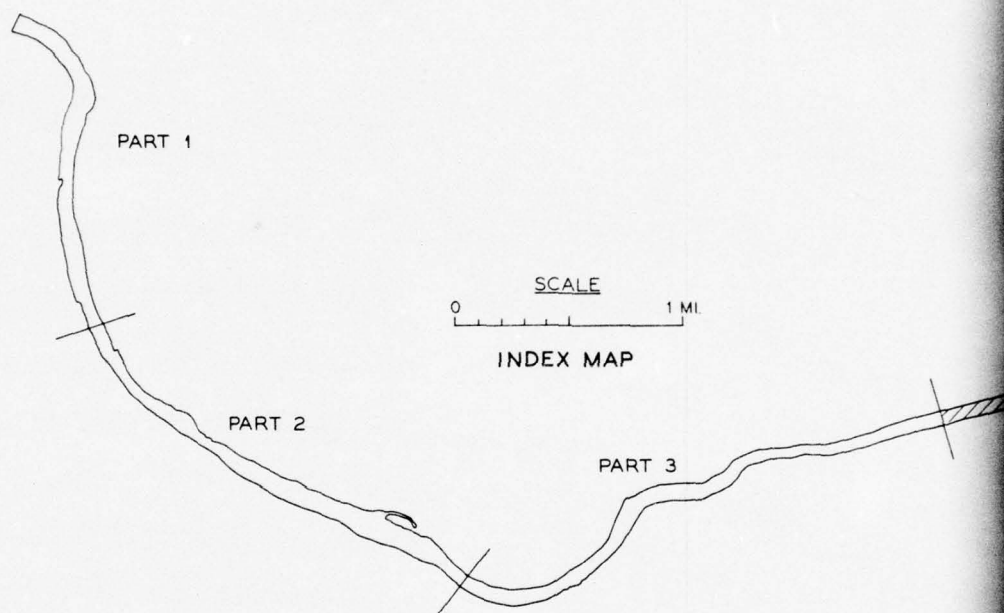
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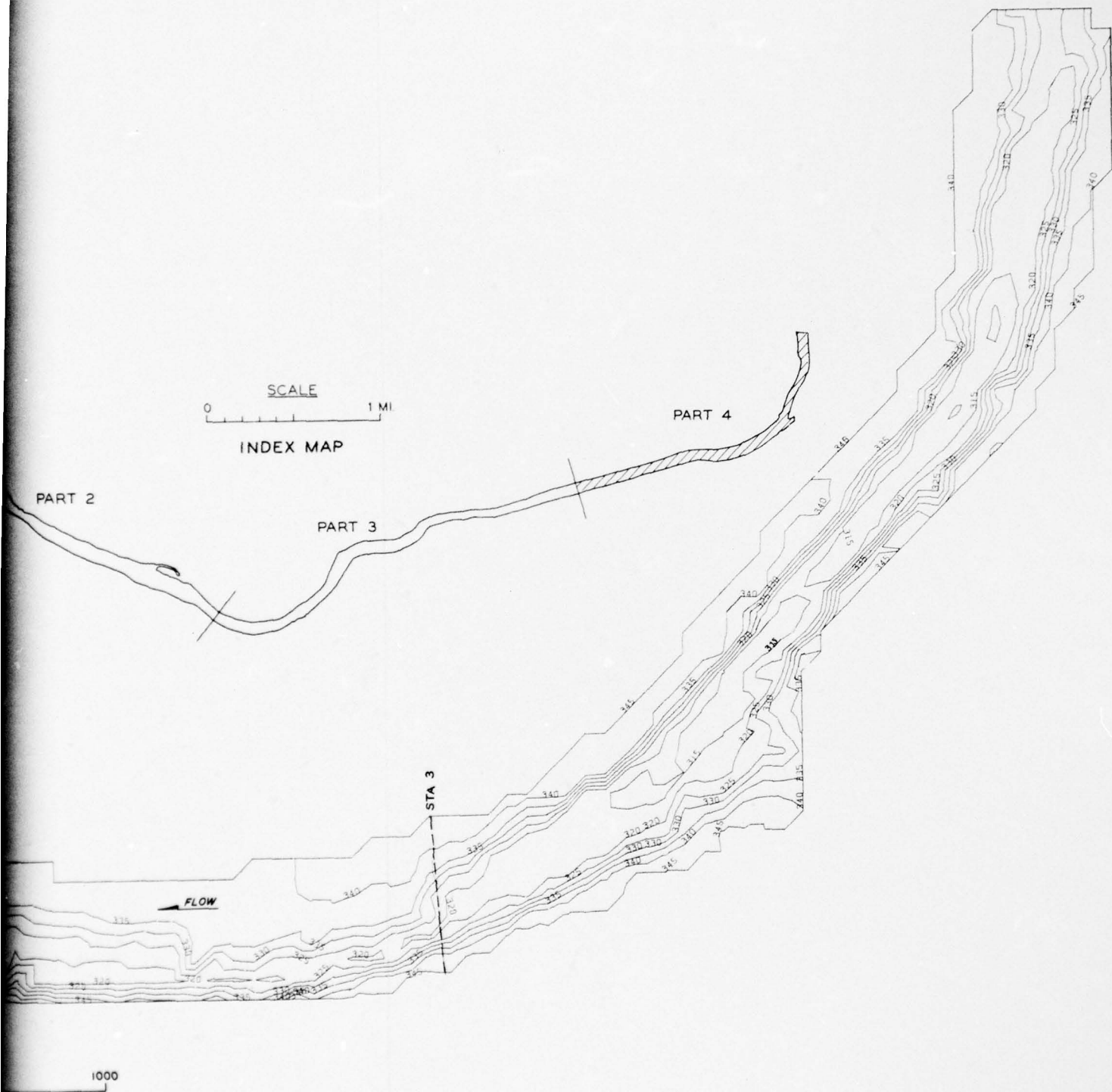
SIDE

2



SIDE CHANNEL PICAYUNE, PART 4

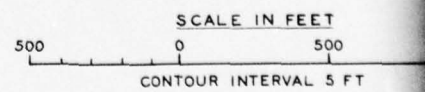
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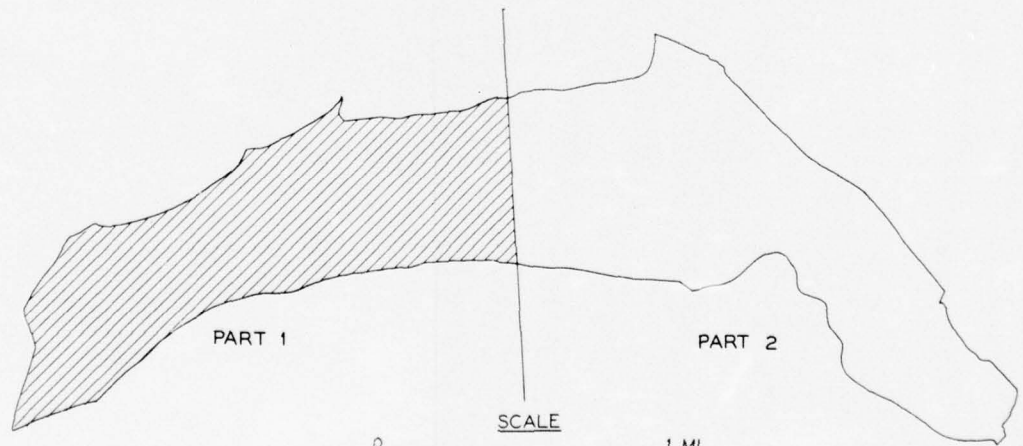
, PART 4

MAP II-11d

3



SIDE CHANNEL CAPE BEN



INDEX MAP

SCALE IN FEET
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CONTOUR INTERVAL 5 FT

CHANNEL CAPE BEND, PART 1

MAP II-12 a



500
CON

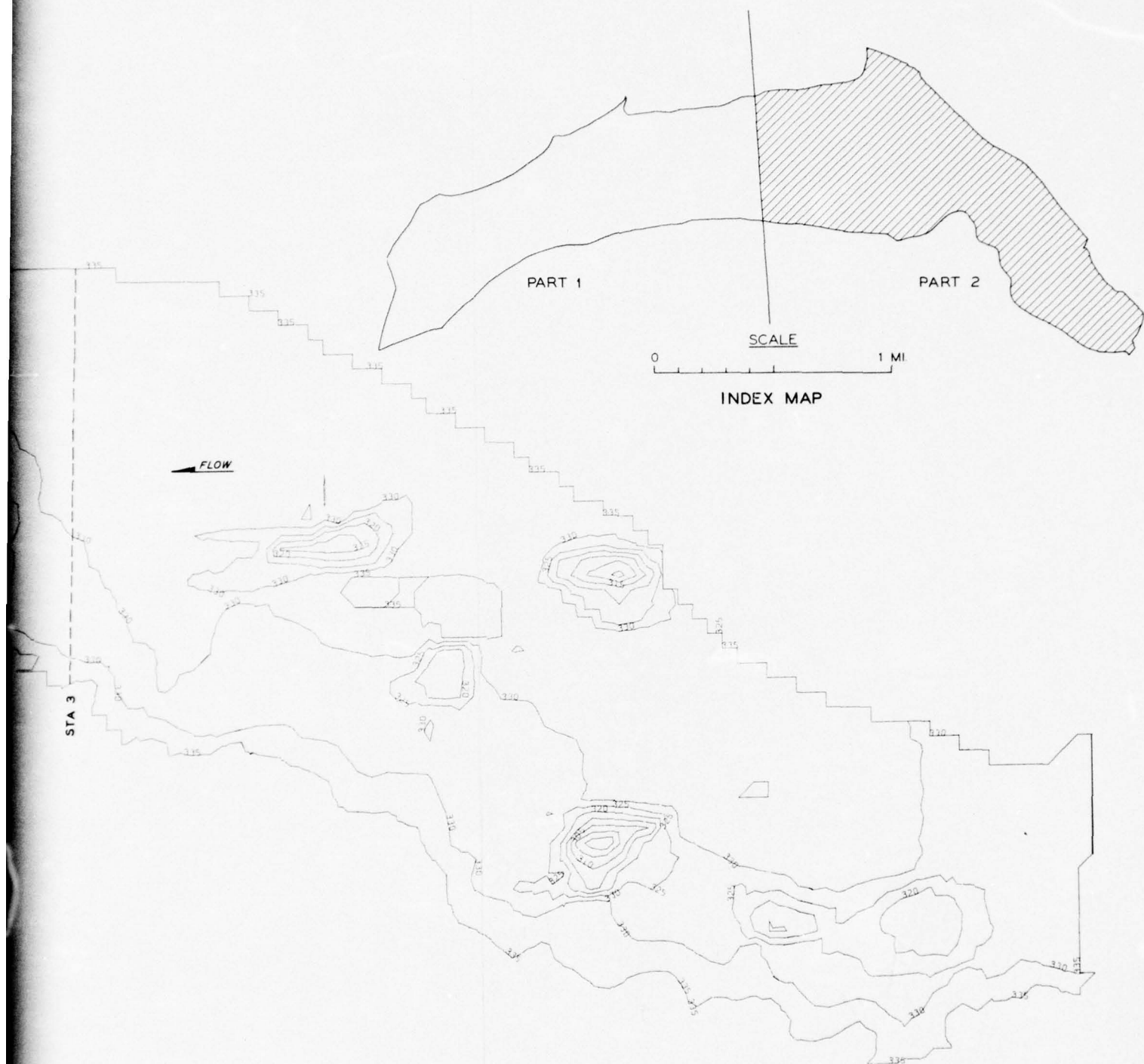
SIDE CHANNEL



SCALE IN FEET
500 0 500 1000
CONTOUR INTERVAL 5 FT

SIDE CHANNEL CAPE BEND, PART 2

2



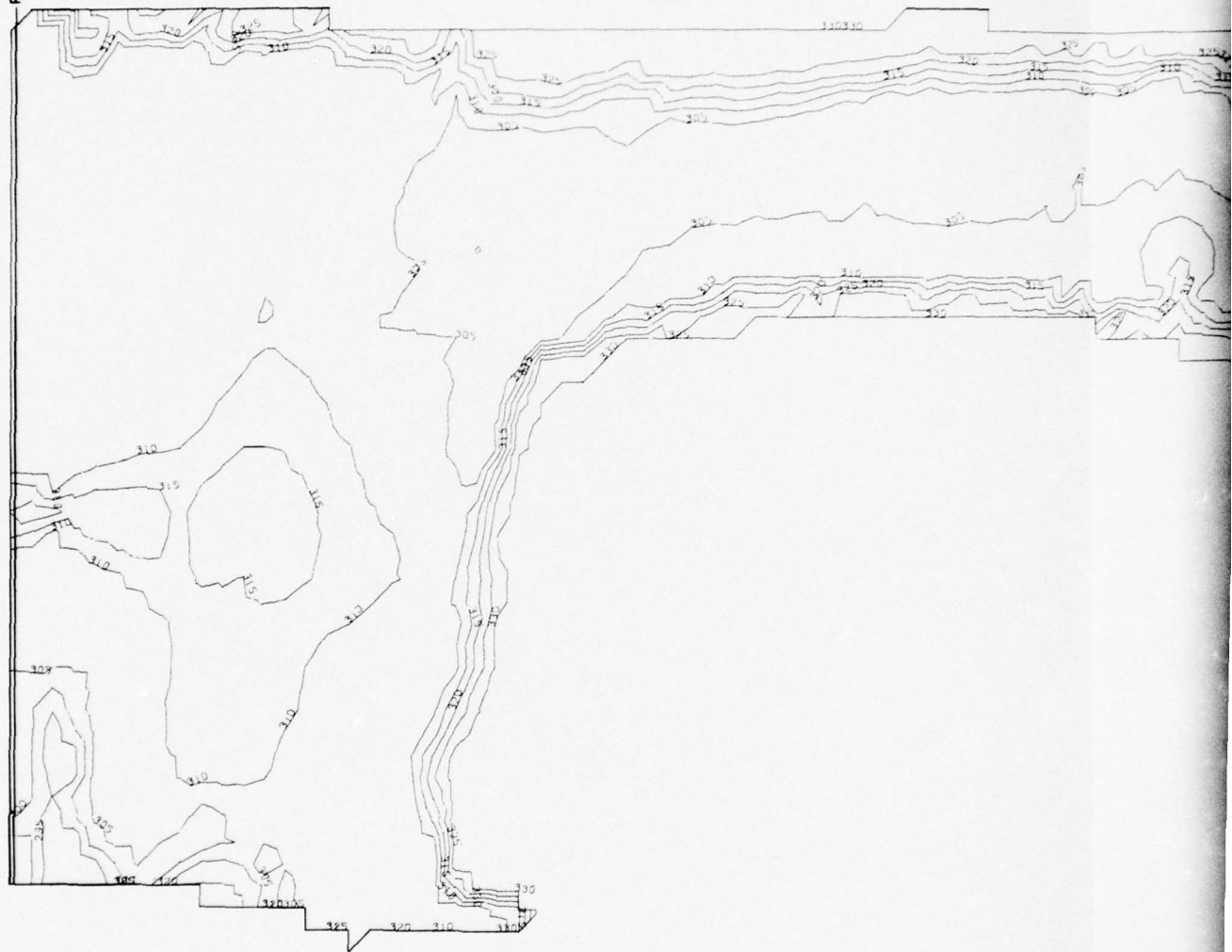
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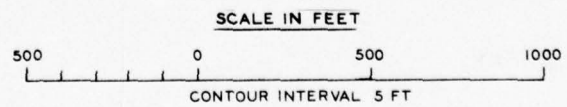
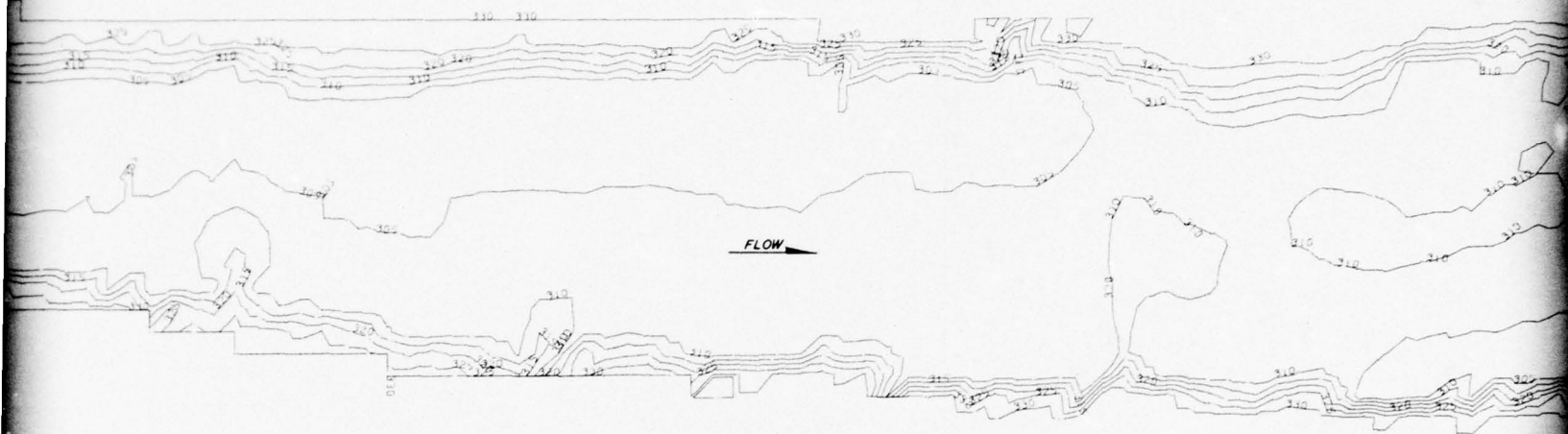
BEND, PART 2

MAP II-126

3

ROCK DIKE

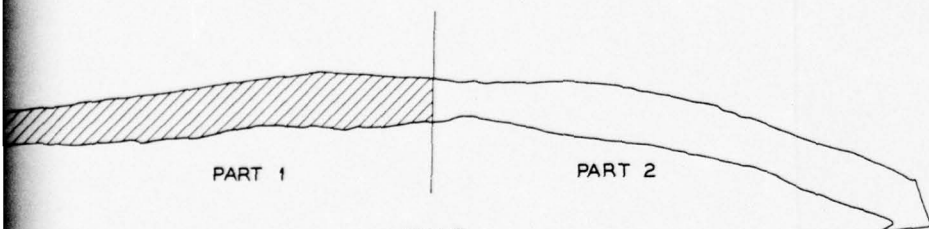




SIDE CHANNEL SANTA FE, PART 1

2

30

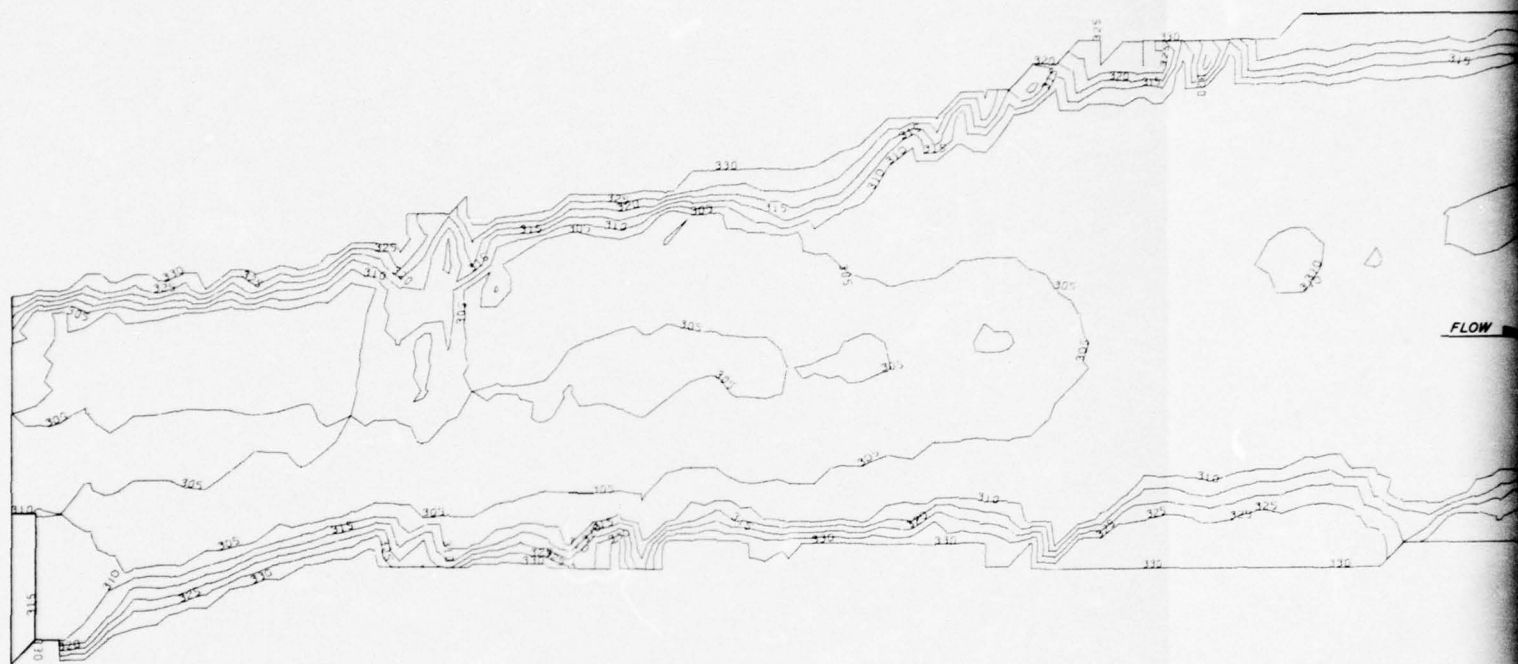


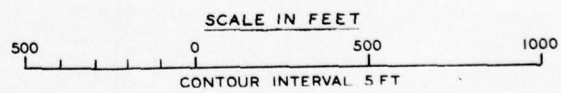
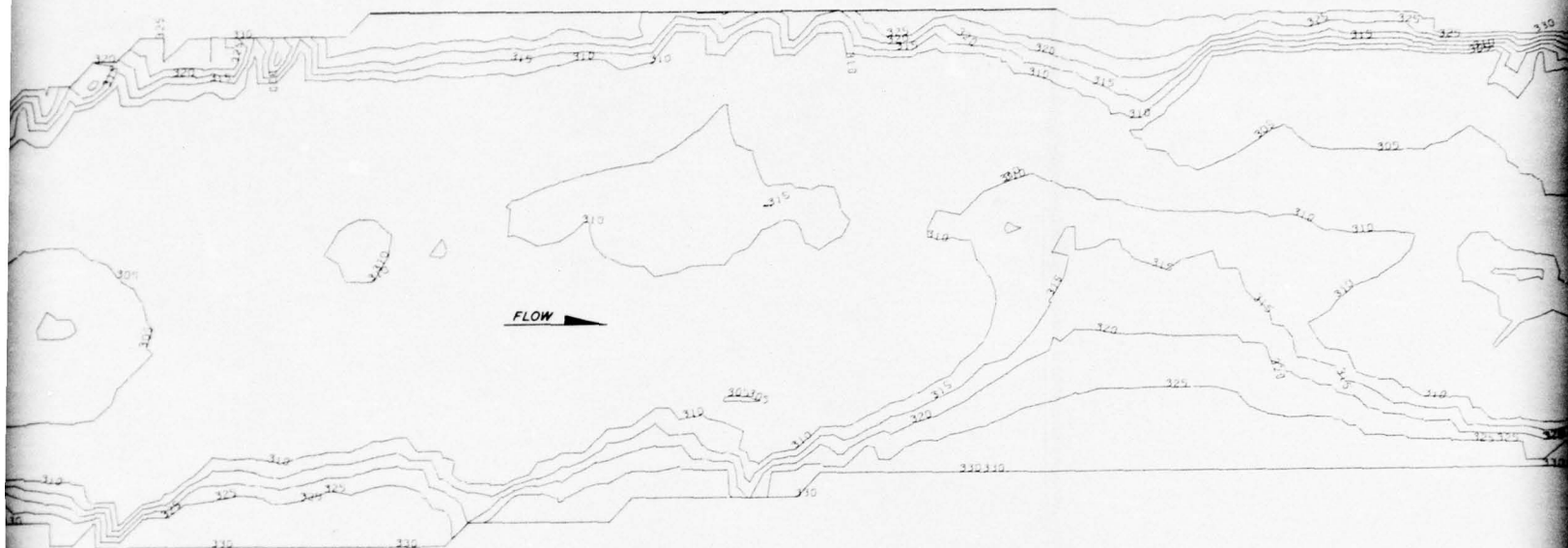
SCALE
0 1 MI.

INDEX MAP

MAP II-13a

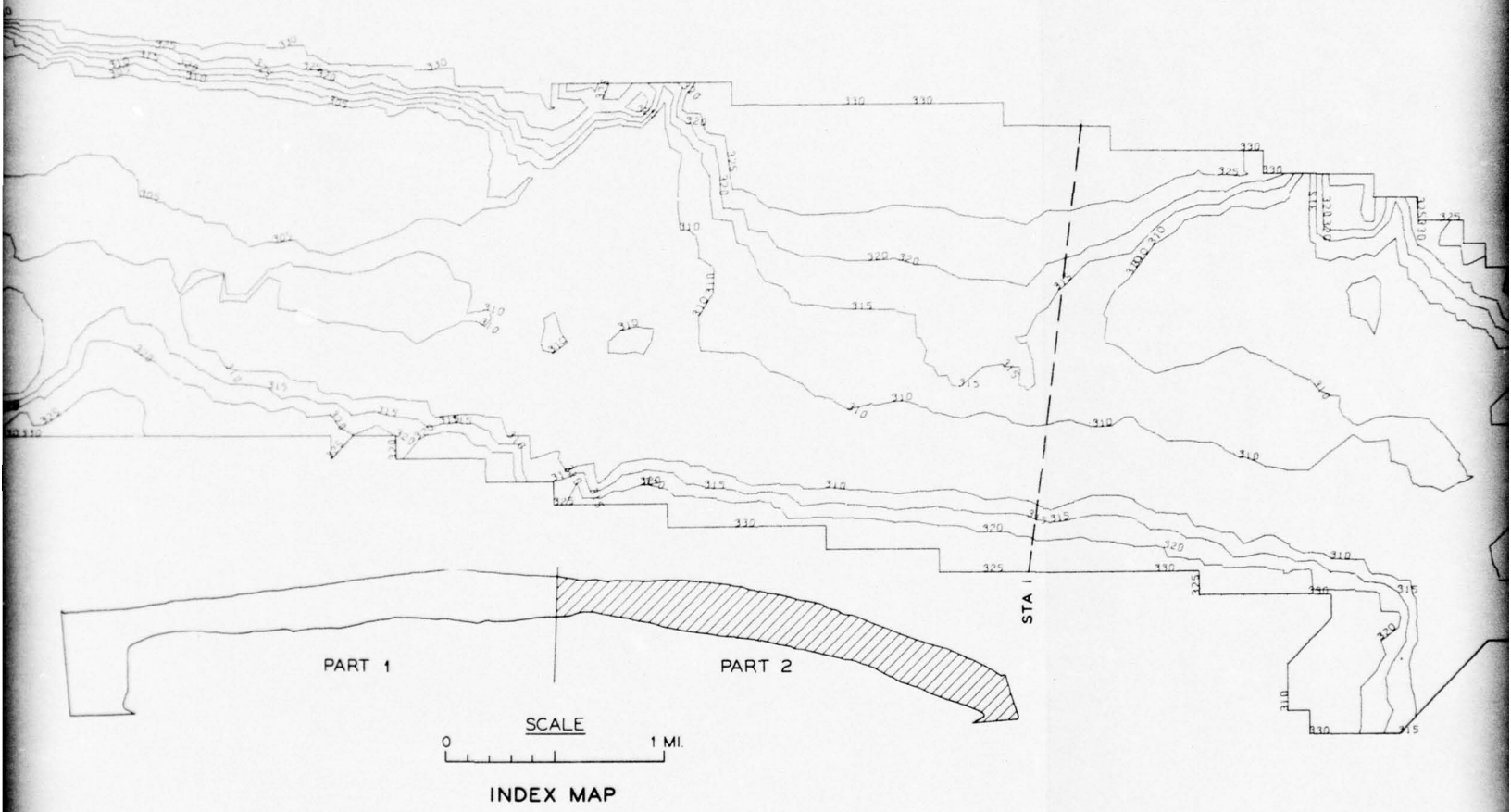
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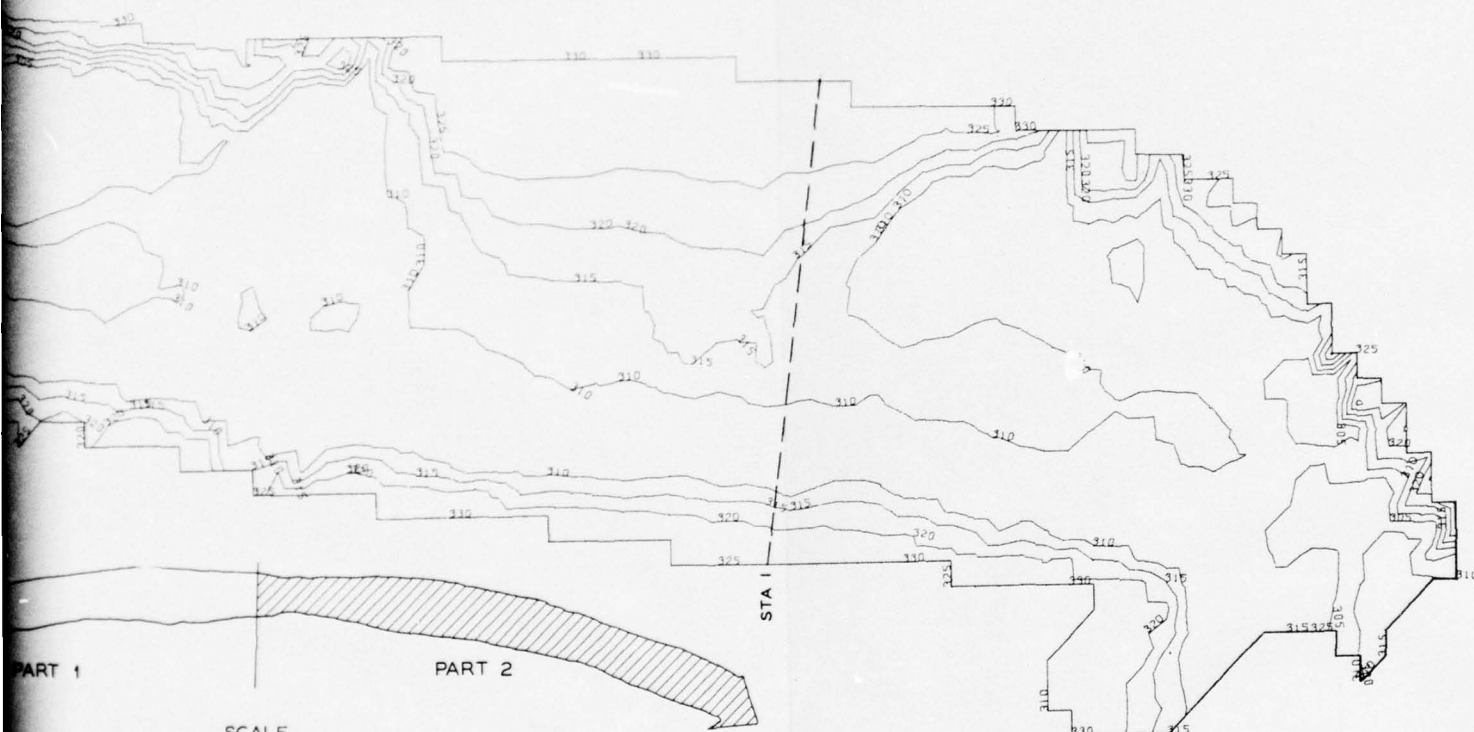


SIDE CHANNEL SANTA FE, PART 2

2



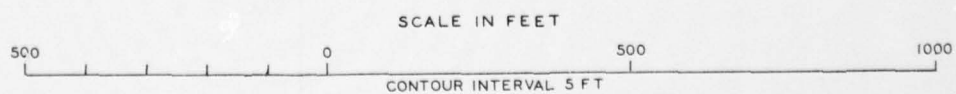
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MAP II-13b

4





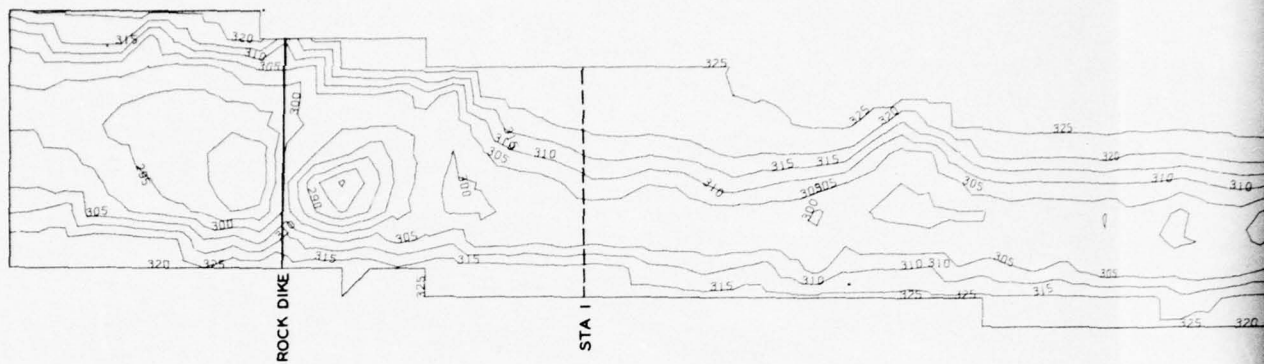
SIDE CHANNEL BILLINGS

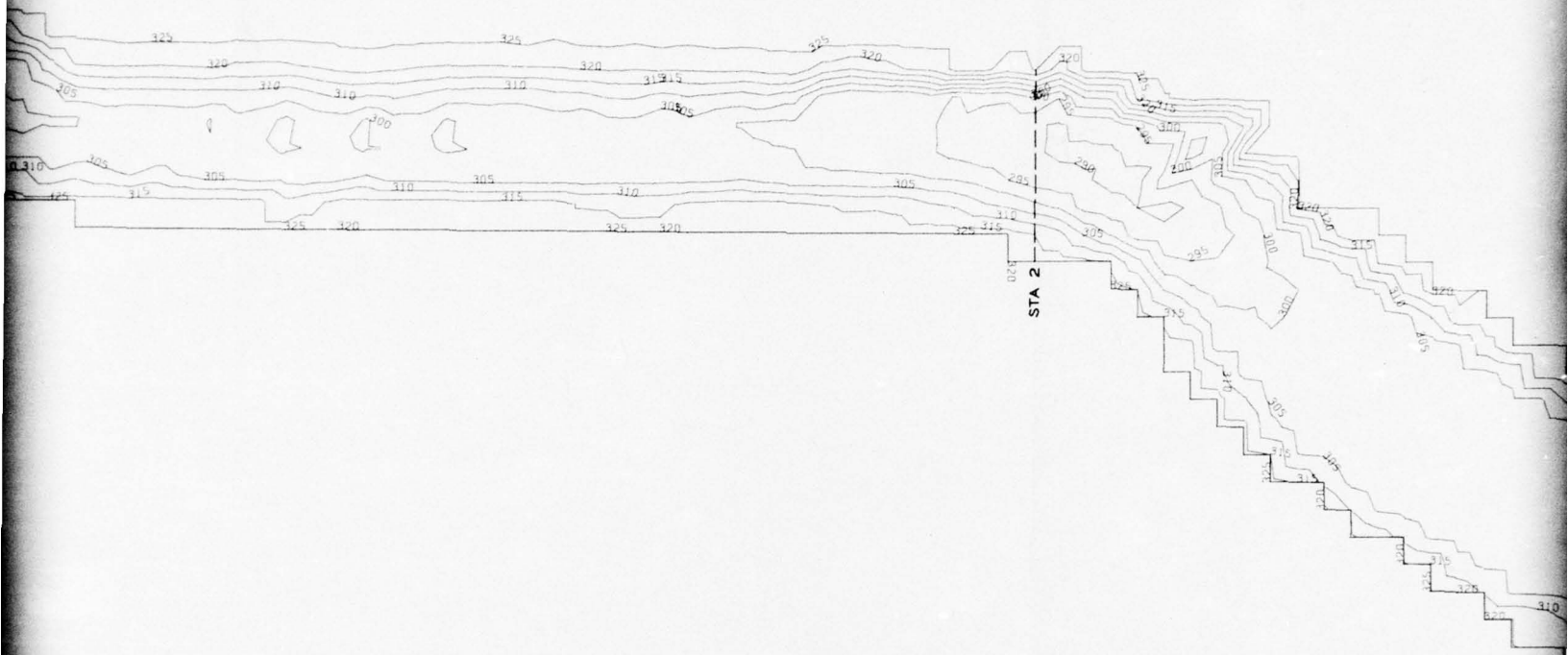
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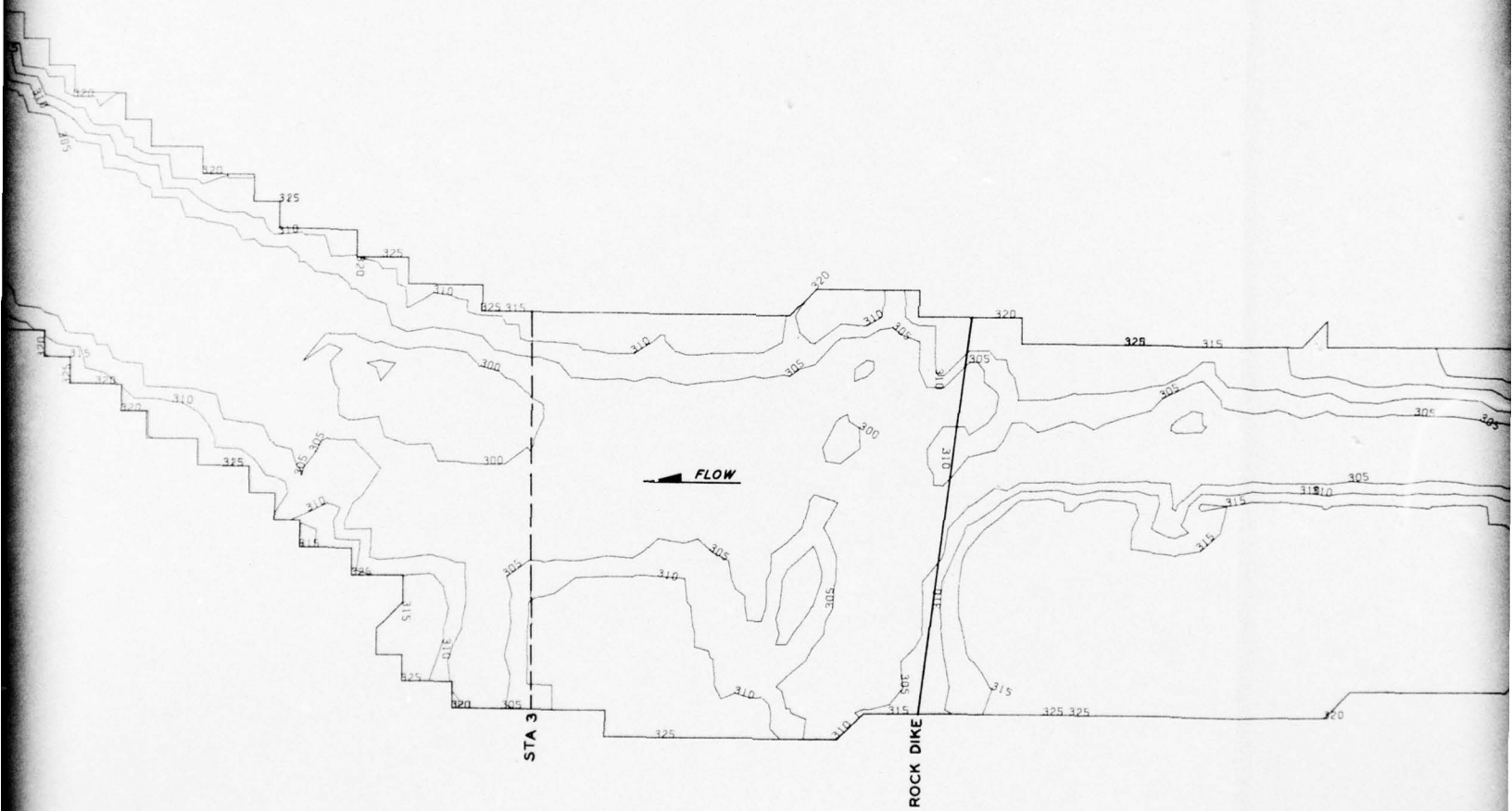




SCALE IN FEET
500 0 500 1000
CONTOUR INTERVAL 5 FT

SIDE CHANNEL BUFFALO

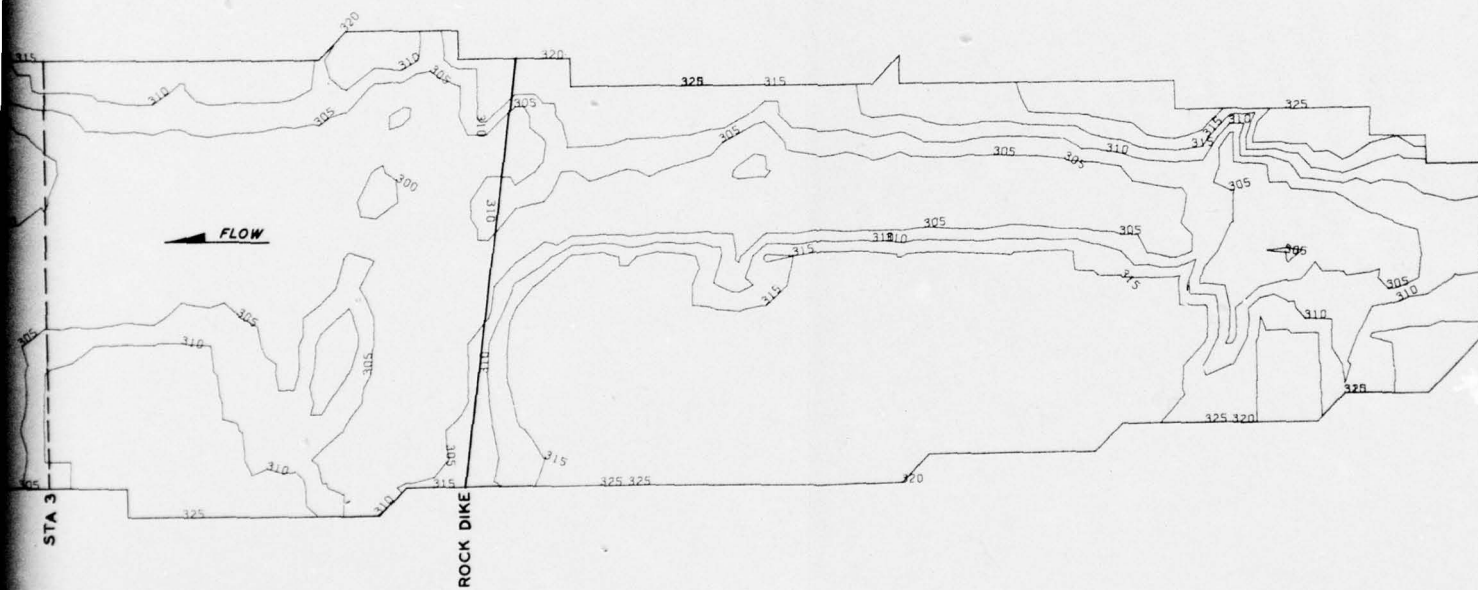
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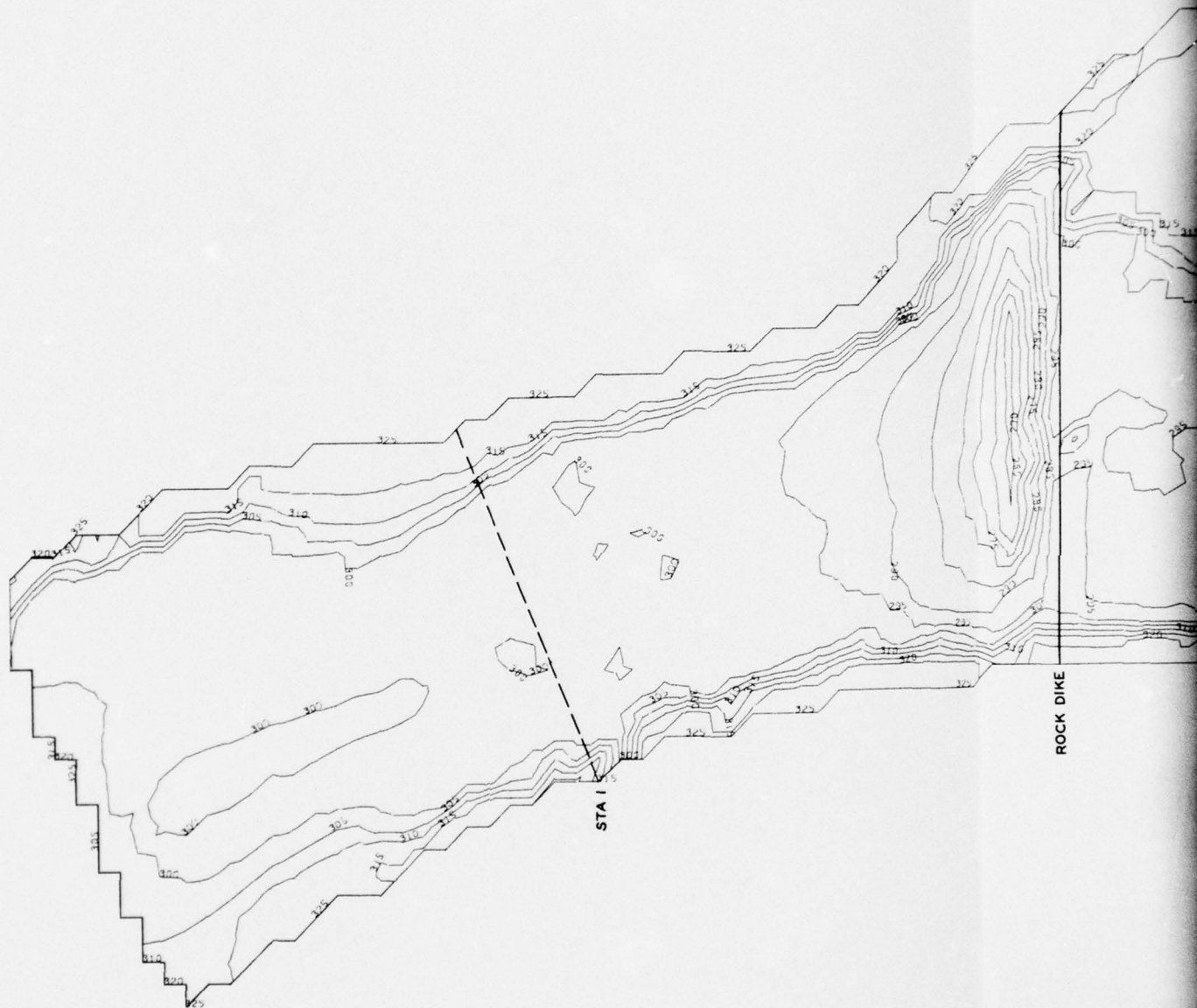
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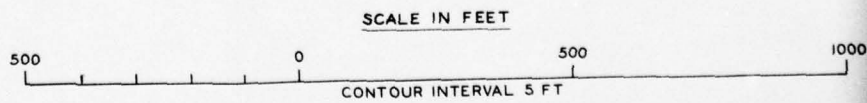
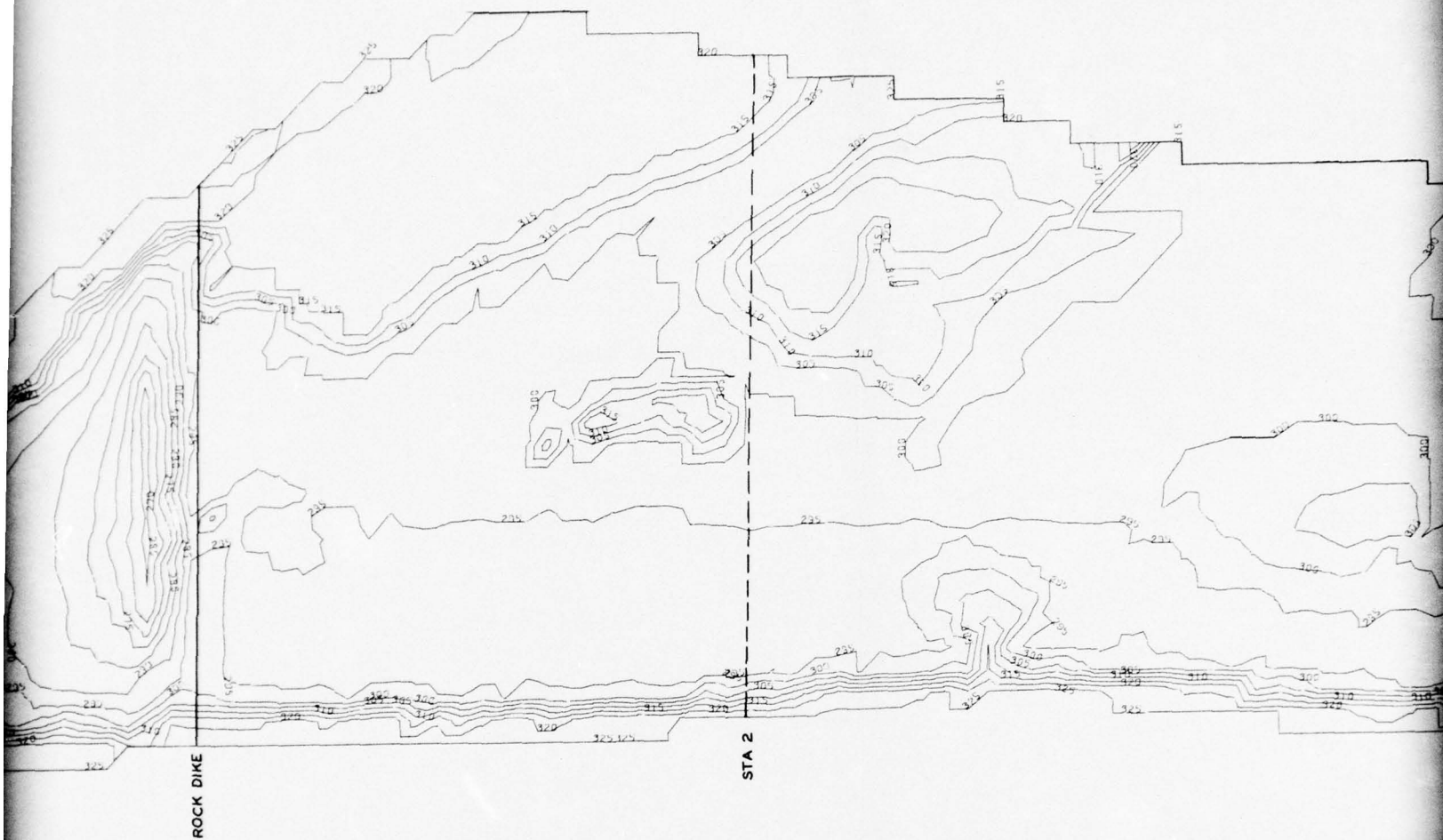
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MAP II-15

4

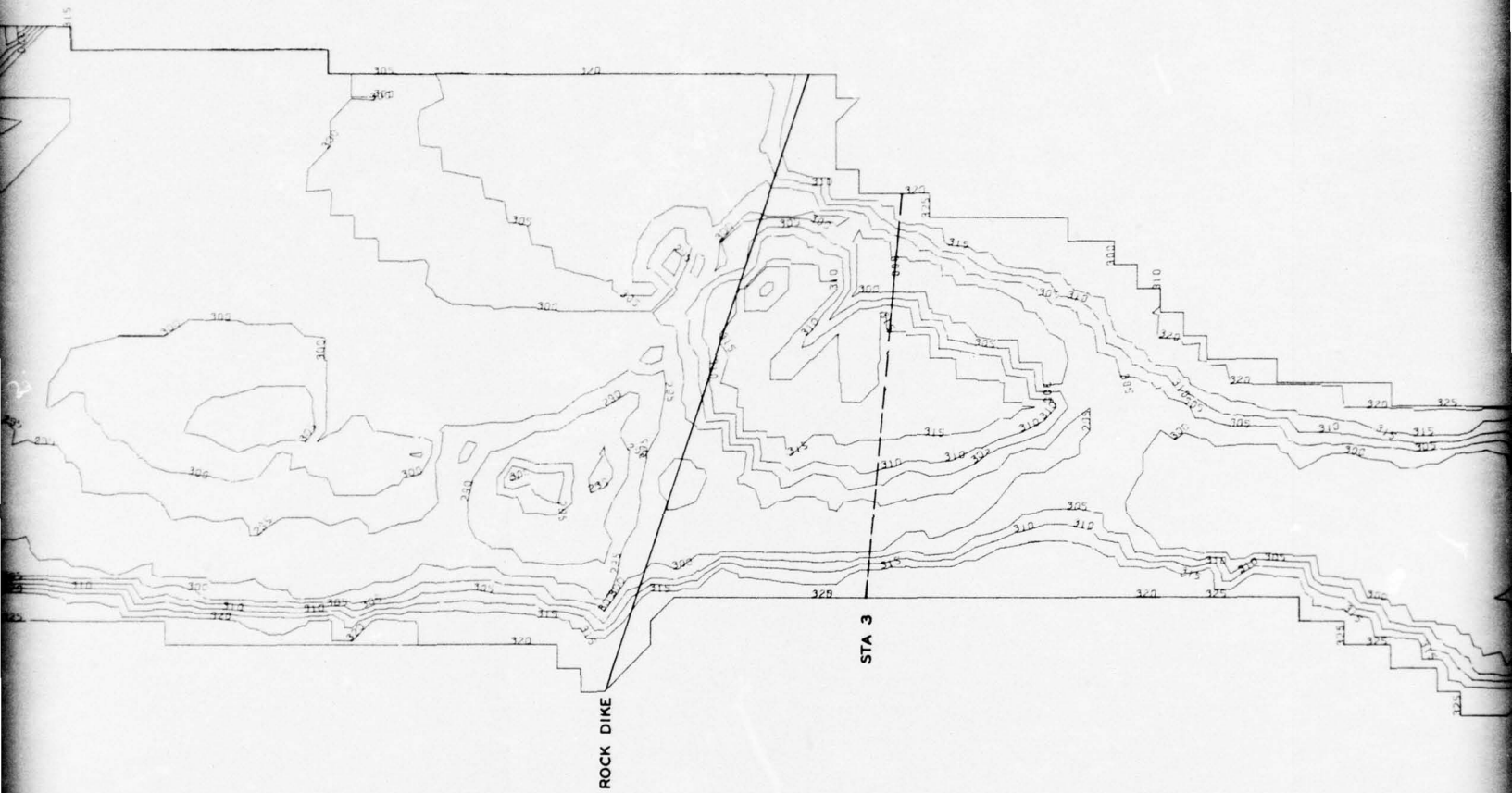




SIDE CHANNEL BROWNS

2

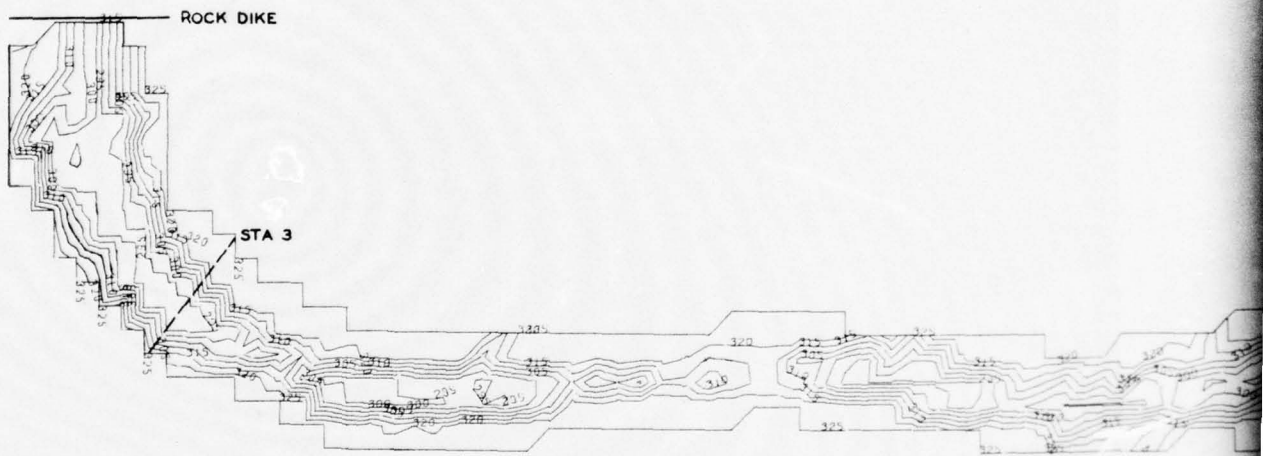
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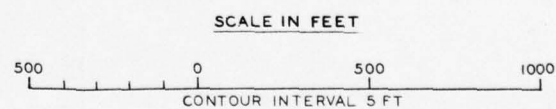
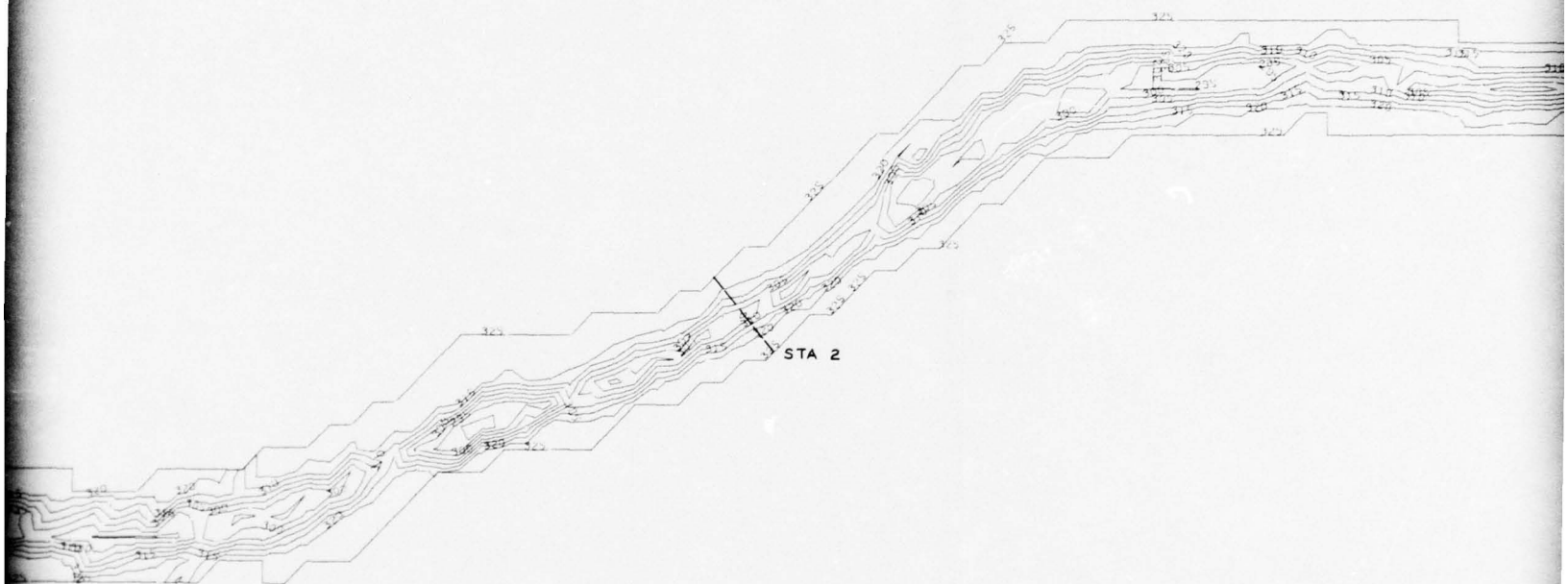


500 1000
FT

BROWNS

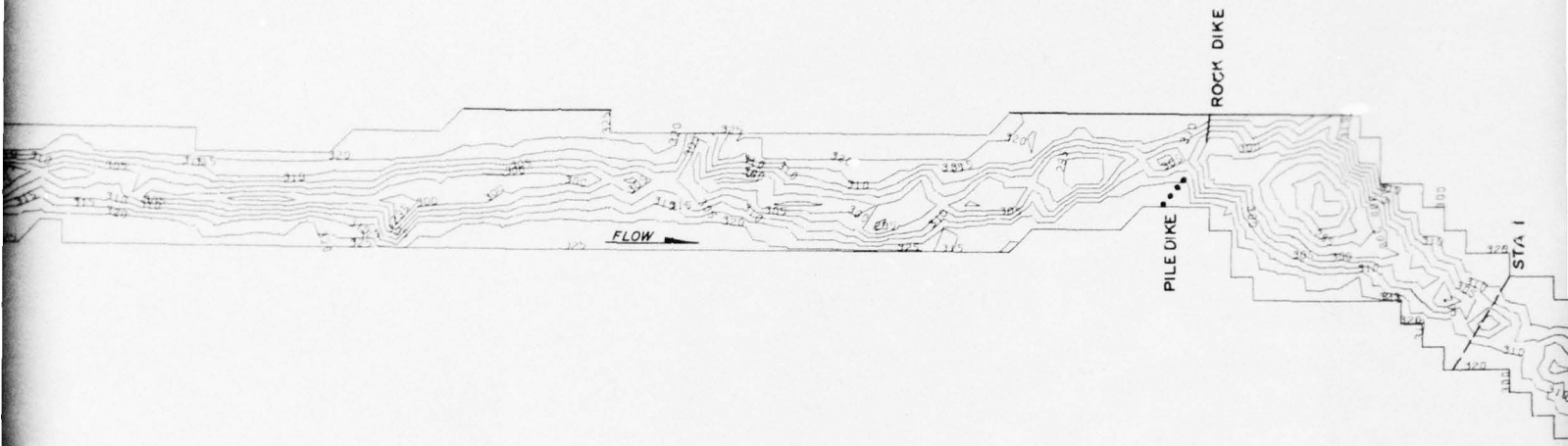
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SIDE CHANNEL THOMPSON

2



1000

MPSON

3

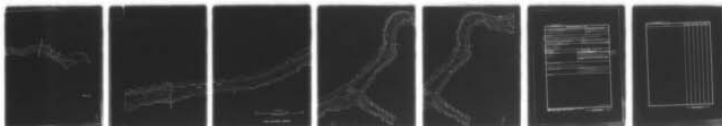
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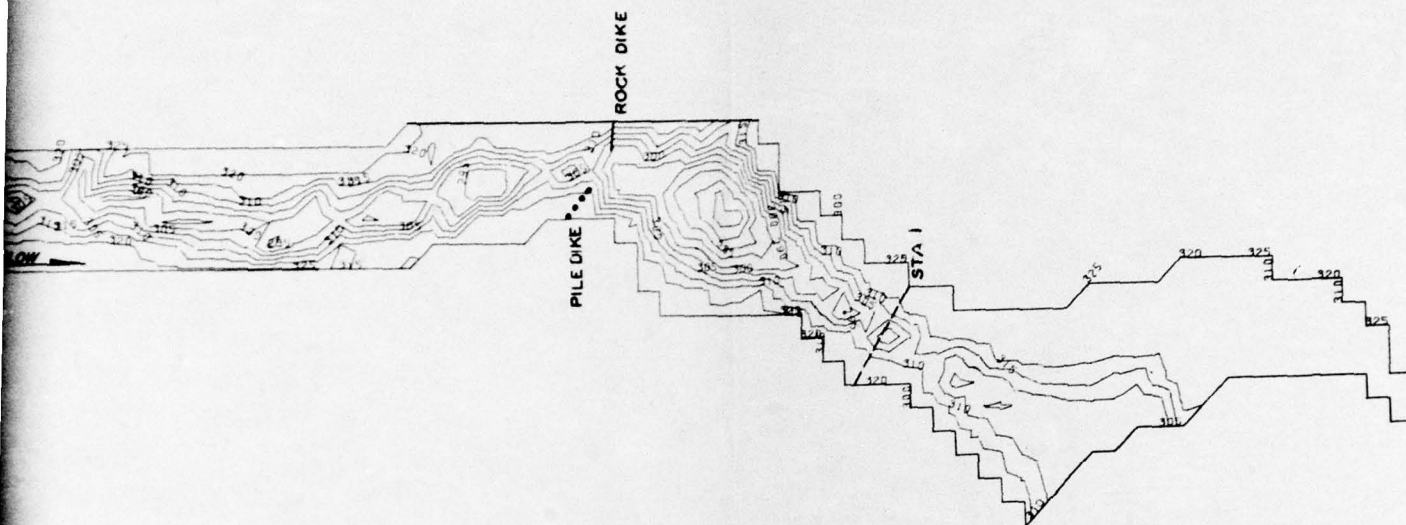
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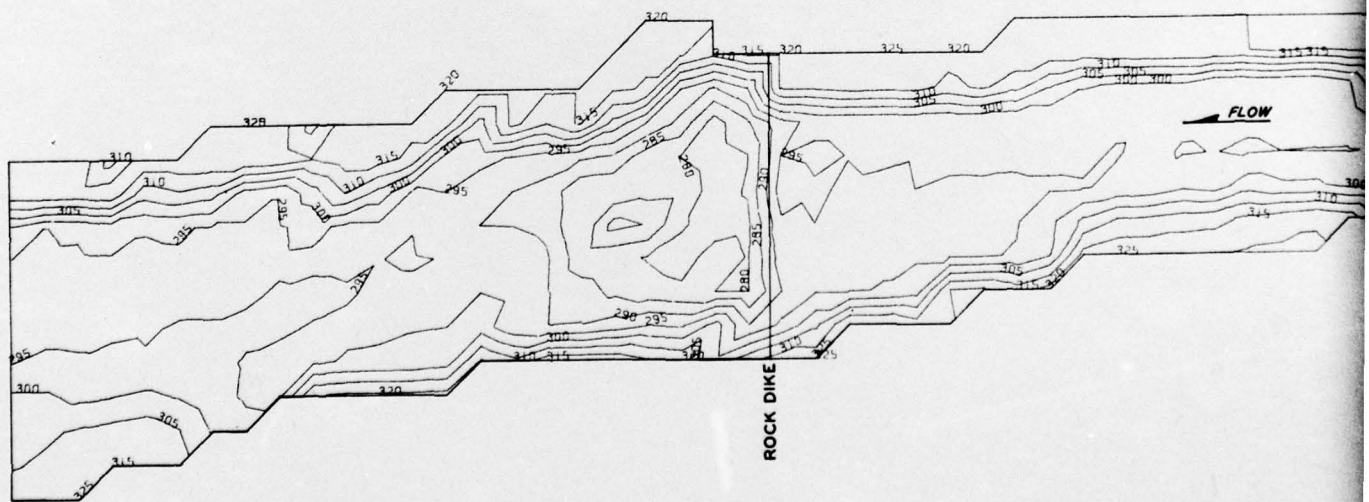
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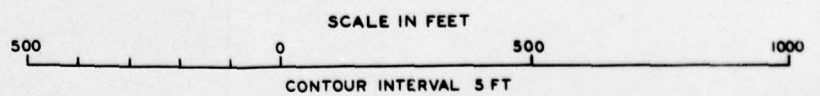
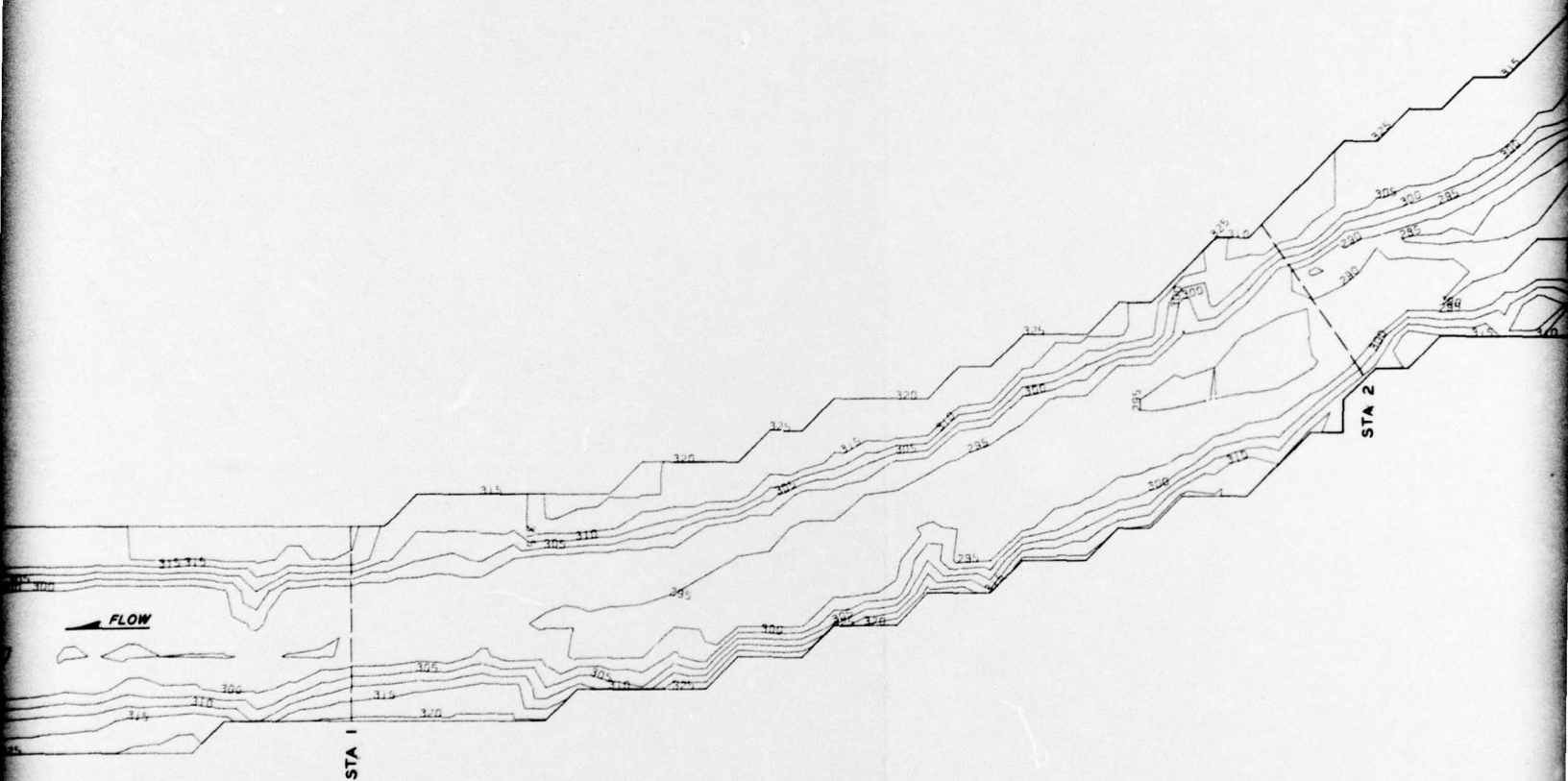
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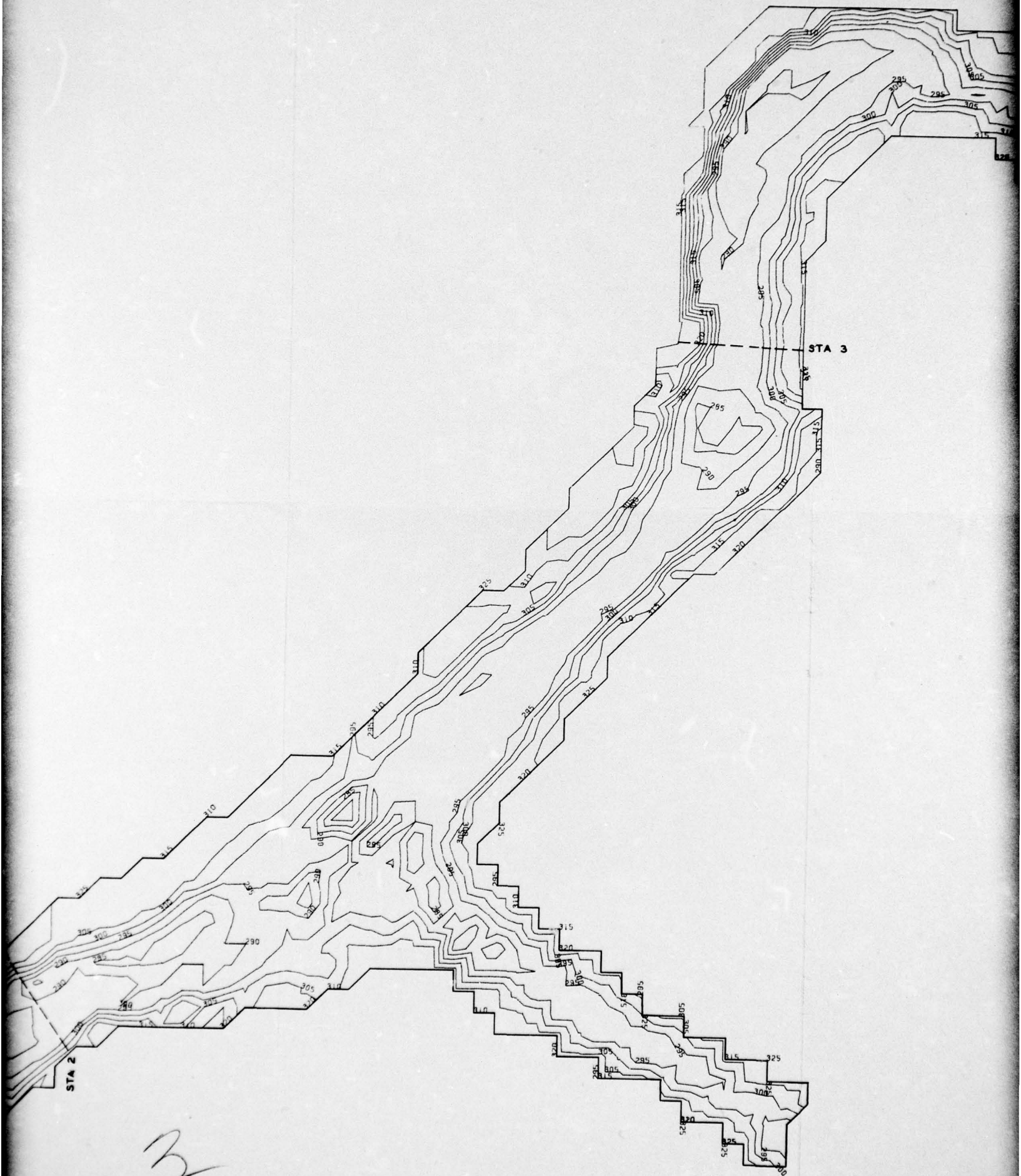
MAP II-17

14

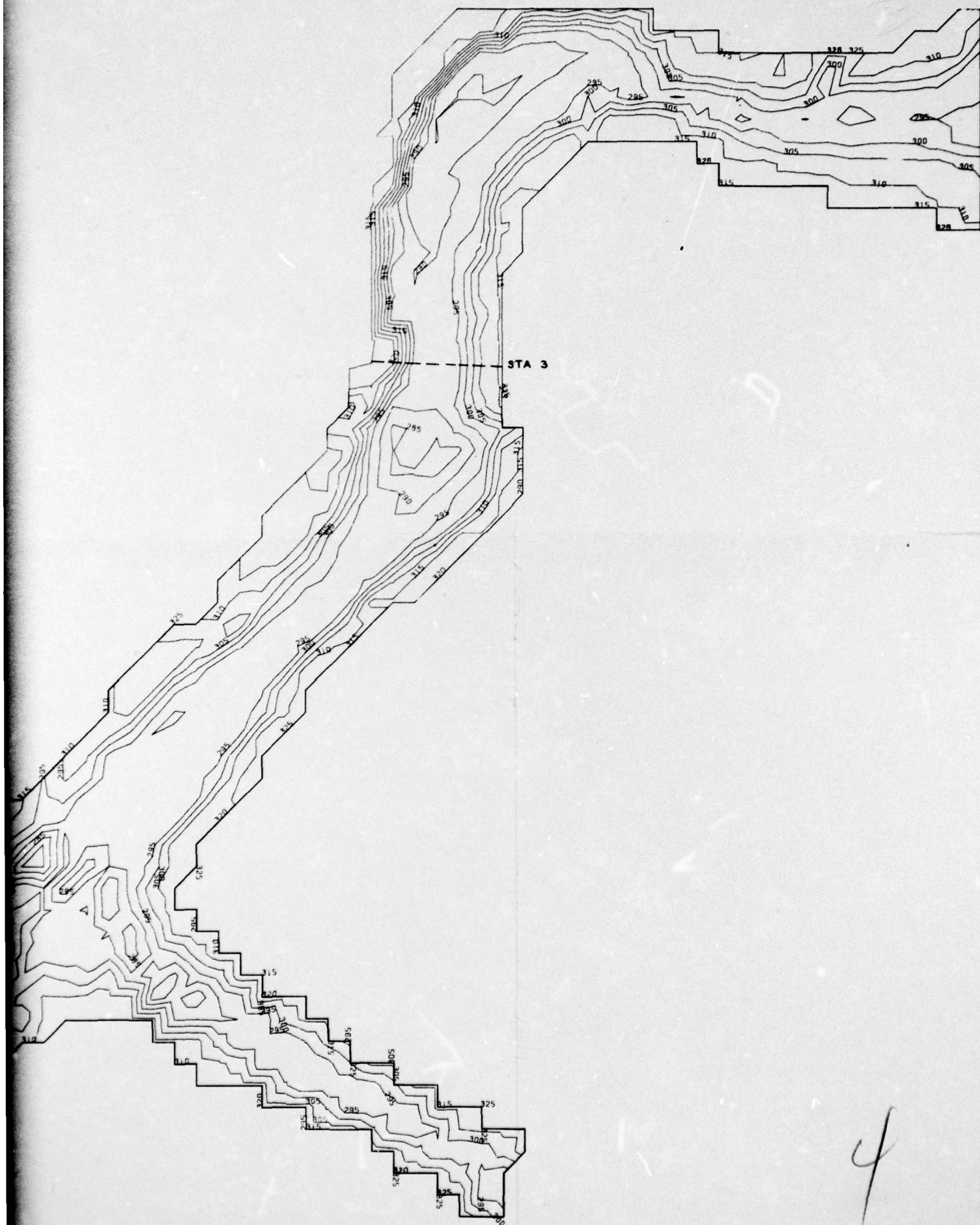




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SIDE CHANNEL SISTER



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